

Re; Combined Airborne Geophysical Magnetometer and
Electromagnetic Survey.

On the; BITTER CREEK CLAIM GROUP

Located; SKEENA M.D. STEWART B.C.

N.T.S. 104 A/4

COORDINATES: 56 Deg. 02' N. 129 Deg. 07' W.

For; MARALGO MINES LTD.

By; T.ROLSTON, Candell Consulting Corp.

Report Signed 15 October 1984

Claims owned by: GREY SILVER MINES LTD. FMC 265524, and,
WILLIAM L. McCULLAGH FMC 266036 (operator)

The Claims occur in two groups:

BITTER CREEK GROUP:

HD 1/2FR/3FR/4FR; Alberta 5/6; Morgan -/1/3/4/6; Ophir 2/3; Creek; Radio Fr.;
Radio 2; Miller; Northern Bell; Roosevelt 2/1; Radio, Radio 3, Morgan 5 + Mayou;
Mayou Fr. + Ophir.

ORE MOUNTAIN GROUP:

Lake Shore; Lead Coil; Gold Hill #1; Lead Coil #2; Ore Fr.; Ore Hill -/3/4;
Hill Fr.; Ore Mtn. #5; Ore Hill #6/#2.

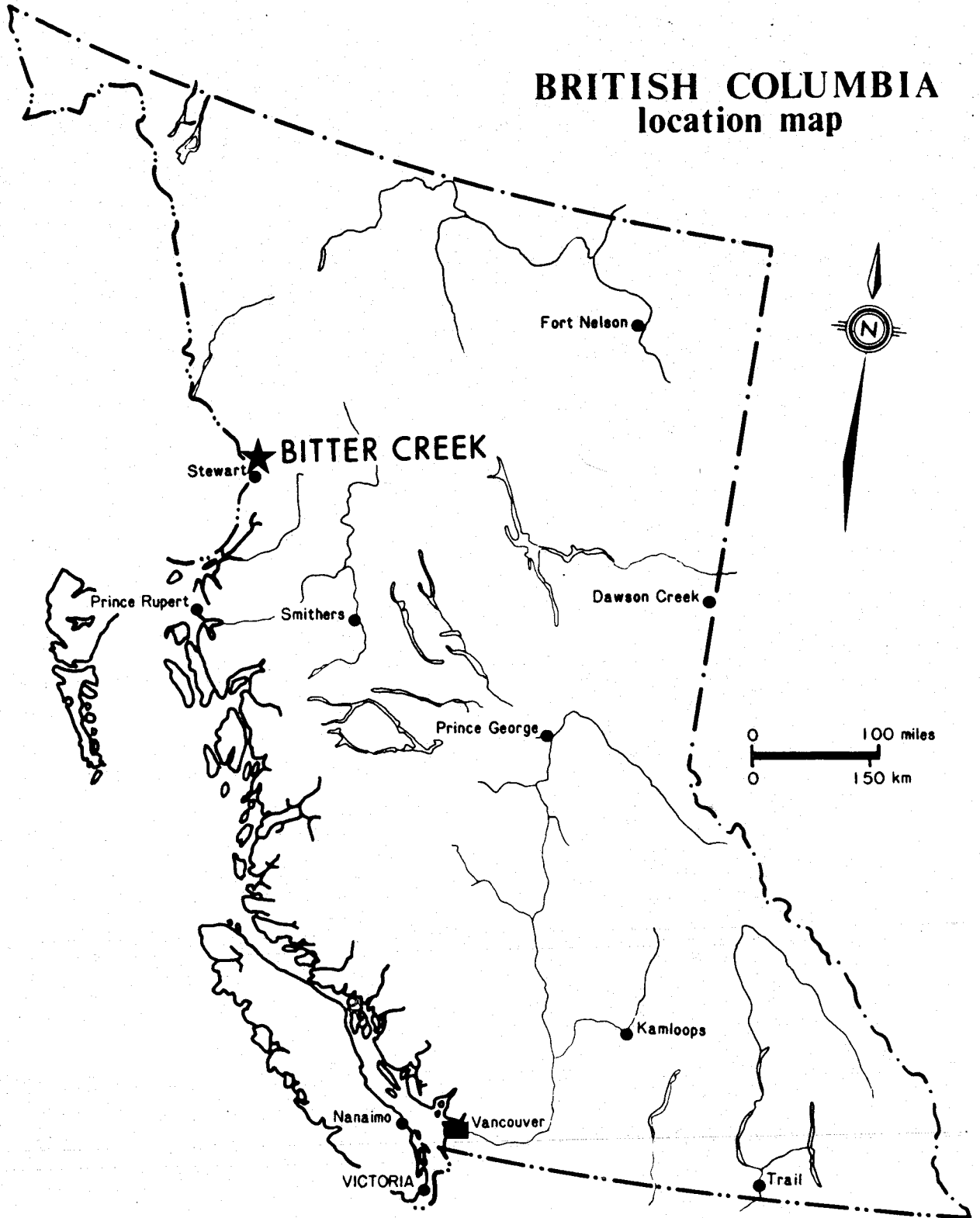
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,352

Part 2
of 2

84-1182-13352 ~~84-1183-~~

BRITISH COLUMBIA location map



MARALGO MINES LIMITED

PROPERTY LOCATION MAP

DRAWN BY: P. HALL

SCALE: 1:7,500,000

DATE: AUGUST 1983

FIG. No. 1

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APPENDICIES

I

RAW DATA HARD COPIES

MAGNETIC and ELECTROMAGNETIC DATA FROM FLIGHTLINE

MAP and DIGITAL/ANALOG COMPUTER STORED DATA

SURVEY PARAMETERS:

A detailed combined airborne magnetometer and VLF electromagnetic survey was conducted over the whole claim group, and the surrounding area known as the Bitter creek - ore mountain area.

A total of over 165 line Km. were flown over the claims and surrounding area. The equipment used was a Sabre Electronics airborne system consisting of a proton free precession magnetometer and A Dual frequency VLF-EM receiver with the detector elements located in a 2 metre "bird" towed 15 metres below the aircraft at a mean terrain clearance of 75 metres. The flight lines were orientated in a south west, north east direction with average line spacing of 200 metres. Flight line control was visual using a topographical map on a scale of 1:10000 correlating prominent topographical features to the map and digital tape recorder and monitor, There are numerous visual tie points, so that flight lines are considered to be accurately plotted. The survey was flown, using a Bell 206-L Jet ranger helicopter chartered from Vancouver Island Helicopters Inc. based at Stewart B.C.

The air survey crew consisted of a three man crew:

1. Pilot; D.PHIPPEN.
2. Project supervisor/ Geophysical Operator; T.Rolston.
3. Navigator; S.Rogers.

The Airborne Geophysical equipment used, is the Sabre "button on" airborne system, consisting of; a Nuclear free precession

"Proton" Magnetometer and Dual frequency VLF-Electromagnetic receiver with the detectors mounted in a two metre "bird" towed fifteen metres below the helicopter. The data collection, storage and monitor system used is an "On board" Moran Engineering analog/digital computer with data stored on magnetic tape, compatible to IBM standards.

INSTRUMENTATION & THEORY

MAGNETIC SURVEY

The Proton Nuclear Free Precession Magnetometer used on this survey, is manufactured by Sabre Electronic Instruments Ltd. of Burnaby, B.C. This instrument measures the total count of the earth's magnetic field intensity with a sensitivity of one gamma. Only two commonly occurring minerals are strongly magnetic; magnetite and pyrrhotite. Hence magnetic surveys are used to detect the presence of these minerals in varying concentration. Magnetic data is useful as a tool for mapping geological lithology and structure, since different rock types have different background amounts of magnetite or mafic minerals.

VLF ELECTROMAGNETIC SURVEY

A Dual frequency VLF-EM receiver manufactured by Sabre Electronic Instruments Ltd. of Burnaby B.C. was used for the VLF-EM survey. The transmitters used were: NKL. Arlington, Wash. U.S.A. at 24.8 Khz. and NAA Annapolis Maryland, U.S.A. at 21.4 Khz. These two stations were used due to there orientation being at approximate

right angles to each other, allowing for good detection of conductors oriented in most any direction on the property. The VLF-EM measurements taken on this survey was the variation in the horizontal component of the signal field strength. Because of its EM frequency, the VLF-EM can pick up conductors caused by electrolyte-filling fault or shear zones and porous horizons, graphite, carbonaceous sediments, lithological contacts as well as sulfide bodies.

COMPUTER ANALYSIS and INTERPRETATION:

The raw magnetic data were recorded on an on board digital / analog computer and read directly into the computer. These data were treated by 'state of the art' computer analytical enhancement programs. The final results were reproduced on a 200 gamma computer-printer plot contour map at a scale of 1:10000. Both Seattle and Annapolis VLF-EM field strength data were plotted & contoured at 5% contour intervals, map sheet # 2 and # 3. The following map sheets to accompany this report:

- Map sheet # 1; PROPERTY CLAIM LOCATION and TOPOGRAPHICAL MAP.
- Map sheet # 2; AIRBORNE GEOPHYSICAL FLIGHT LINE MAP with PROPERTY CLAIM LOCATION and TOPOGRAPHY.
- Map sheet # 3; AIRBORNE GEOPHYSICAL ISOMAGNETIC MAP, 200 gamma contour interval.
- Map sheet # 4; AIRBORNE GEOPHYSICAL VLF-EM (Seattle) FIELD STRENGTH MAP at 5 % contour interval.
- Map sheet # 5; AIRBORNE GEOPHYSICAL VLF-EM (Annapolis) FIELD STRENGTH MAP at 10 % contour interval.
- Map sheet # 6; AIRBORNE GEOPHYSICAL INTERPRETED MAGNETIC LINEARS and GEOLOGICAL CONTACTS.

Map sheet # 7; AIRBORNE COMPOSITE GEOPHYSICAL STRUCTURAL LINEARS mapping INTERPRETED LITHOLOGY with MAGNETIC and VLF-ELECTROMAGNETIC anomalies.

The Bitter creek claim group consists of 32 reverted crown granted mineral claims as listed below:

<u>Claim Name</u>	<u>Record Number</u>	<u>Record Date</u>	<u>Former Crown-grant No.</u>
Lake Shore	882 (1)	Jan. 10/85	4808
Lead Coil	883 (1)	Jan. 10/85	4811
Gold Hill	884 (1)	Jan. 10/85	4812
Lead Coil #2	885 (1)	Jan. 10/85	4813
Ore Fraction	886 (1)	Jan. 10/85	4814
Ore Hill	887 (1)	Jan. 10/85	4815
Ore Hill #3	888 (1)	Jan. 10/85	4817
Ore Hill #4	889 (1)	Jan. 10/85	4818
Hill Fraction	890 (1)	Jan. 10/85	4819
Ore Mountain #5	891 (1)	Jan. 10/85	4820
Ore Hill #6	892 (1)	Jan. 10/85	4821
Roosevelt #2	516 (3)	Mar. 1/85	895
Roosevelt #1	515 (3)	Mar. 1/85	896
Ore Hill #2	1129 (3)	Mar. 1/85	4816
Radio	518 (3)	Mar. 1/85	4571
Miller	491 (11)	Nov. 17/84	893
Northern Bell	492 (11)	Nov. 17/84	897
Alberta #5	467 (11)	Nov. 17/84	5875
Alberta #6	468 (11)	Nov. 17/84	5876
Morgan	474 (11)	Nov. 17.84	5881

<u>Claim Name</u>	<u>Record Number</u>	<u>Record Date</u>	<u>Former Crown-grant No.</u>
Morgan #1	475(11)	Nov. 17/84	5882
Morgan #3	476(11)	Nov. 17/84	5883
Morgan #4	477(11)	Nov. 17/84	5860
Morgan #6	478(11)	Nov. 17/84	5862
Ophir #2	479(11)	Nov. 17/84	5871
Ophir #3	480(11)	Nov. 17/84	5872
Radio Fraction	489(11)	Nov. 17/84	4575
Radio #2	490(11)	Nov. 17/84	4573
Creek	488(11)	Nov. 17/84	4570
Morgan #5/Mayou	849(11)	Nov. 17/84	5861
Mayou Fr./Ophir	850(11)	Nov. 17/84	5869
Radio #3	848(11)	Nov. 17/84	4573

1) INTERPRETED STRUCTURAL DATA. Map sheet # 7;

There appear to be two major structural control systems on this property, labelled 'A-A' to 'N-N' and will be discussed in that order, not necessarily in order of priority. Also fourteen minor linears labelled '1-1' to '14-14'. The geological contacts have been interpreted from the contoured magnetic interfaces, striking mainly in a N. E. - S.W. direction.

Fault linear 'A-A', map sheet # 7;

Strikes N.W.-S.E. through the south west part of the survey area. Starting on the south end of this fault linear, this fault is terminated on the south by an intrusive. Also at this interface -

is an E.M. (Seattle) field strength anomaly.

Fault linear 'A-A' - '9-9';

Approx. 300 metres north west, it is interrupted by another intrusive. At this magnetic interface, linear 'A-A' is intersected by linear '9-9' striking N.E.-S.W., which appears to be a cross linear fault (?), fracture or shearing linear. Also at this interface there is an E.M. (Seattle) field strength anomaly. This fault linear 'A-A' has shifted or slipped to the N.N.E., by approx. 300 metres and continues in a north west strike.

Fault linear 'A-A' - '8-8';

At this magnetic interface, fault linear 'A-A' starts at an interpreted geological contact and is intersected by cross linear fault (?), fracture or shear linear '8-8' which strikes N.E.-S.W. Due to these geological intersections, this is considered an exploration target and should be investigated further by some detailed geological mapping.

Fault linear 'A-A' - 'L-L' - '6-6';

This intersection 'A-A' striking N.W.-S.E. and 'L-L' striking N.-S. appears to be an intersection of two major faults, with cross linear fault (?), fracture or shear '6-6' which strikes N.E.-S.W., this cross linear faulting is located on Ore Hill # 6 mineral claim. From the map, (sheet # 7) it is located approx. 250 to 300 metres east of the main road at fairly flat topography, so appears to be accessible and should be further investigated by detailed geological and or geophysical methods.

Fault linear 'A-A' - '4-4';

Located just west of the boundary of Ore Hill # 6 mineral claim and the main road and easily accessible. Linear '4-4' is a cross fault (?), fracture or shear.

Fault linear 'A-A' - '1-1';

Located near the main road and easily accessible. Linear '4-4' is a cross linear fault (?), fracture or shear. Because these last three linear intersections ('A-A' - '1-1', '4-4' and '6-6') are so accessible, they should be investigated in detail by a geologist to possibly explain the correlation between geology and geophysics.

Fault linear 'B-B', map sheet # 7;

Strikes N.W.-S.E. through the south west part of the survey area. parallel with fault linears 'A-A' and 'C-C'. Starting on the south end of this fault linear, this fault is terminated on the south by an intrusive and an interpreted geological contact.

Fault linear 'B-B' - '9-9';

At this intersection '9-9' a cross linear fault (?), fault or shear striking N.E.-S.W. Linear 'B-B' is also parallel to an interpreted geological contact in this area and is interrupted by an intrusive.

Fault linear 'B-B' - '8-8';

Located on the north west of an intrusive, parallel to an interpreted geological contact and cross faulted by linear '8-8', which is more likely a fracture or shear. Due to the

geological - geophysical distortions in this area, 'B-B', '9-9' and '8-8' interrupted by an intrusive, this zone should be investigated in detail by geological and/or geophysical methods.

Fault linear 'B-B' - '6-6';

At this intersection '6-6' a cross linear fault (?), fracture or shear striking N.E.-S.W., is also parallel to an interpreted geological contact in this area, is located on the southern part of Ore Hill # 3 mineral claim.

Fault linear 'B-B' - 'M-M';

Located on the north west of Ore Hill # 3 mineral claim, is an intersection of two major fault linears, 'B-B' striking N.W.-S.E. and 'M-M' striking N.N.E.-S.S.W.

Fault linears 'B-B' - 'L-L' and '4-4';

Located on the boundaries of mineral claims Ore Fraction and Ore Mountain # 5, approx. 400 metres west of the main road. This zone should be investigated by some geological mapping due it's accessibility.

Fault linear 'B-B' - '1-1';

Located on the north boundary of Ore Mountain # 5 mineral claim and aprox. 50 metres west of the main road. Fault linear 'B-B' extends into Clements (Bear) Lake at the north west boundary of the survey area. Again, this geological intersection should be investigated by geology, due to it's accessibility.

Fault linear 'C-C' map sheet # 7;

Strikes N.W.-S.E. through the south west part of the survey area. Starting on the south end of this fault linear, this linear starts on the south of Bitter Creek in the area of two interpreted geological contacts and the intersection of linear '12-12' cross linear fault (?), fracture or shear striking N.-S.

Fault linear 'C-C' - '9-9' and '8-8';

Located on the south west part of Lead Coil # 2 mineral claim. Linear 'B-B' striking N.W.-S.E., is intersected by cross fault (?), fracture or shear linears striking N.E.-S.W. Also an interpreted geological contact and is interrupted by an intrusive which strikes N.N.E.-S.S.W. through the north west boundary of Lead Coil and the south east boundary of Gold Hill mineral claims. Linear '9-9' also continues through the south east part of mineral claims Lead Coil # 2, Ore Fraction and Lead Coil. Fault linear 'C-C' appears to continue to the north west through to fault (?), fracture or shear '6-6'.

Fault linear 'C-C' - '6-6';

Located on Ore Hill # 2 mineral claim and the west boundary of L4809. At this location, fault linear 'C-C' strikes N.W.-S.E. intersecting linear fault (?), fracture or shear '6-6' and an interpreted geological contact, both striking N.E.-S.W.

Fault linear 'C-C' - 'M-M' and '4-4';

Located on Ore Hill # 4 mineral claim. Major fault linear 'C-C' striking N.W.-S.E., is intersected by major fault linear 'M-M' -

which strikes N.N.E.-S.S.W. and cross linear fault (?), fracture or shear striking N.E.-S.W.

Fault linear 'C-C' - 'L-L' and '1-1';

Located off of the north boundary of Ore Mountain # 5 mineral claim and aprox., 150 metres south east of the main road and Clements (Bear) Lake. Fault linear 'C-C' extends into the lake, off of the survey area.

Fault linear 'D-D', map sheet # 7;

Fault linear 'D-D' - '4-4' and '2-2';

Starting on the south at an intrusive. Fault linear 'D-D' striking N.W.-S.E. is intersected by cross linear '2-2' fault (?), fracture or shear striking N.N.E. and cross linear '4-4' fault (?), fracture or shear striking N.E.-S.W., located on the north boundary of mineral claims Ore Hill and Ore Hill # 4.

Fault linear 'D-D' - 'M-M' and '3-3';

This zone is a cross faulting of two major fault linears 'D-D' striking N.W.-S.E. and major fault linear 'M-M' striking N.N.E.-S.S.W., also cross linear '3-3' fault (?), fracture or shear striking E.-W. through both fault linears 'D-D' and 'M-M'. Located approx. 400 metres north of Ore Hill # 4 mineral claim and 400 metres west of the main road.

Fault linear 'E-E' map sheet # 7;

Fault linear 'E-E' - '14-14';

Starting in the south at Bitter Creek in the south center part of

the survey area on an interpreted geological contact. Major fault linear 'E-E' strikes N.W.-S.E. and cross linear '14-14' fault (?), fracture or shear striking N.E.-S.W. This zone is located approx. 100 metres north of the Bitter Creek road on the west side of Radio Creek but is probably not very accessible due to washouts along this road.

Fault linear 'E-E' - '12-12' and '13-13';

Located approx. 600 metres north of Bitter Creek and on the west side of Radio Creek. At this location, major fault linear 'E-E' strikes N.W.-S.E., intersecting E.-W. is cross linear '13-13' fault (?), fracture or shear and N.-S. is cross linear '12-12' fault (?), fracture or shear. There is a VLF-EM. anomaly (Annapolis) to the north of this structure.

Fault linear 'E-E' - '10-10';

Located approx. 1400 metres north of Bitter Creek and on the south west side of a tributary of Radio Creek. Major fault linear 'E-E' is intersected by cross linear '10-10' fault (?), fracture or shear striking N.E.-S.W. and an interpreted geological contact. Flanked on the north and the south west by intrusives.

Fault linear 'E-E' - 'N-N' and '9-9';

Located on the south west boundary of Lead Coil mineral claim and the north east boundary of Ore Fraction mineral claim. This zone is the intersection of two major fault linears 'E-E' striking N.W.-S.E., 'N-N', striking N.S. and cross linear '9-9' fault (?), fracture or shear. 300 metres to the north west, linear 'E-E'

is interrupted by an intrusive and an interpreted geological contact, located on the boundaries of mineral claims Lead Coil and L4810. A further 500 metres north west of this intrusive, at an interpreted geological contact and at the boundaries of mineral claims L4810 and Ore Fraction, linear 'E-E' continues north west to the cross linear '6-6'.

Fault linear 'E-E' - '6-6' and '5-5';

Located on the Lake Shore mineral claim, major fault linear 'E-E' intersects cross linear '6-6' fault (?), fracture or shear, striking S.W. and approx. 100 metres north west of the small lake and old cabin about the south center part of the Lake Shore mineral claim. Cross linear '5-5' fault (?), fracture or shear strikes N.E. and is possibly displaced and an extension of linear '6-6', it is located on the north west part of the Lake Shore mineral claim, aprox. 200 metres north west of linear '6-6'. Approx. 200 metres to the north west of linear '5-5', linear 'E-E' intersects cross linear '4-4' fault (?), fracture or shear striking parallel to linear '5-5' and '6-6'. This linear intersection is located on the north boundaries on mineral claims Lake Shore and Ore Hill.

Fault linear 'E-E' - 'M-M' - '2-2' and '3-3';

Located approx 300 metres north west of linear '4-4' on major fault linear 'E-E', cross linear '2-2' fault (?), fracture or shear strikes N.N.E.-S.S.W. Cross linear '3-3' fault (?), fracture or shear strikes E.-W. Located aprox. 300 metres northwest of linear '3-3' is the intersection of major fault

linears 'E-E' and 'M-M'.

Fault linear 'F-F' map sheet # 7;

Fault linear 'F-F' - '11-11';

Starting at the south of major fault linear 'F-F' intersects cross linear '11-11' fault (?), fracture or shear at Bitter Creek strikes N.N.E. This structure would be accessible except for the washouts on the Bitter Creek road.

Fault linear 'F-F' and 'K-K';

Located on the road on the south east part of the Creek mineral claim, is the intersection of major fault linear 'F-F' striking N.W.-S.E. and major fault linear 'K-K' striking N.-S. This structure would be accessible except for the washouts on the Bitter Creek road. Approx. 800 metres further to the north west, linear 'F-F' is interrupted by a major intrusive for about 300 metres and then continues again approx 300 metres more in strike, to cross linear '10-10'.

Fault linear 'F-F' - '10-10';

Fault linear 'F-F' striking N.W.-S.E. is intersected by cross linear '10-10' fault (?), fracture or shear striking N.E.-S.W. and a VLF-EM. (Annapolis) anomaly. Flanked on the south east by a major intrusive and interrupted on north west by an intrusive.

Located approx. 500 metres north west at an interpreted geological contact on the Morgan # 3 mineral claim and continues in strike to cross linear '9-9'.

Fault linear 'F-F' - 'N-N' and '9-9';

Located around the peak of Ore Mountain there appears to be a complex geological structure as interpreted from the airborne geophysical data. (1) Major fault linear 'F-F' striking N.W.-S.E. on the south west of the peak of Ore Mountain. (2) Major fault linear 'N-N' striking N.E.-S.W., on the north west of the peak of Ore Mountain, intersecting major fault linear 'F-F' on the west of the peak of Ore Mountain. (3) Cross linear '9-9' fault (?), fracture or shear striking N.E.-S.W., intersecting major fault linear 'F-F' on the south of the peak of Ore Mountain. (4) Linear '7-7' fault (?), fracture or shear, striking N.E.-S.W. from north east of the peak of Ore Mountain through the saddle and lower peak. (5) An interpreted geological contact on the north east and the peak of Ore Mountain, parallel to linear '7-7'. (6) Coincident VLF-EM (Seattle and Annapolis) anomalies extending from the peak of Ore Mountain north east through the saddle to the lower peak. Due to the survey elevation control at this location and the EM., conductors being detected on six parallel flight lines, this VLF-EM., anomalous zone can not be reflecting topography alone, (if at all). This zone (Ore Mountain peak, saddle and lower peak) should be investigated in detail by geological and/or geophysical methods.

Fault linear 'F-F' - '4-4' and '5-5';

Located at the north west end of major fault linear 'F-F' striking N.W.-S.E., intersected by prallel linears '4-4' and '5-5', both striking N.E.-S.W.

Fault linear 'G-G' - 'N-N' map sheet # 7;

Fault linear 'G-G' starts at an interpreted contact on the north west of the lower peak of Ore Mountain, strikes N.W. to the intersection of major fault linears 'G-G' and 'N-N'. This fault intersection is located on the north central boundary of survey area.

Fault linears 'H-H' and 'I-I' map sheet # 7;

Starting in the south east part of the survey area, at Roosevelt Creek. Both are parallel major fault linears striking N.W., intersecting cross linear '11-11' fault (?), fracture or shear striking N.E.-S.W. Approx. 1300 metres north west of Roosevelt Creek, these two fault linears are terminated by a major intrusive. Major fault linear 'I-I' striking north west, on the south west part and through mineral claims L897, Roosevelt # 1, Roosevelt # 2, and L894. It appears that this major fault linear 'I-I' could be the structural control for mineralization on these reverted crown granted mineral claims. Major fault linear 'H-H' strikes N.W., through the center of the HA claim group being a parallel structure to linear 'I-I', this could also be a major control structure for mineralization.

Fault linear 'J-J' map sheet # 7;

Starting in the south east part of the survey area, at Roosevelt Creek, major fault linear 'J-J' strikes N.N.W. Approx. 500 metres north of Roosevelt Creek, major fault linear 'J-J' intersects cross linear '11-11' fault (?), fracture or shear striking N.W. and S.S.W., also a VLF-EM. (Seattle) anomaly. this major fault

linear 'J-J' runs through the west part of the HA claim group and to the east of mineral claims Radio Fraction, and L4572.

Fault linear 'K-K' map sheet # 7;

Major fault linear 'K-K' strikes N.-S. from the intersection of major fault linears 'F-F' and 'K-K'. Located on the road on the south east part of Creek mineral claim and extends north on the west of the Radio and Radio Fraction mineral claims and L4572. This could also be a major control structure for mineralization on these reverted crown granted mineral claims.

Fault linears 'L-L' - 'M-M' - 'N-N' map sheet # 7;

These three major cross fault linears have already been discussed previously in this report while analyzing linears 'A-A' to 'F-F'.

Linear '10-10' map sheet # 7;

This cross linear fault (?), fracture or shear strikes N.W. from the intersections of linears 'E-E', 'F-F' and continues to strike N.W. through the survey area, through mineral claims Alberta # 5, Alberta # 6, Radio # 3, Morgan # 5/Mayou, L5868, L5864 and L5890. This linear structure '10-10' is parallel to an interpreted geological contact and strikes N.E.-S.W. on the south of Ore Mountain and on the north of a major intrusive through to the north east of the survey area. It would appear that this structure would be a major geological control.

CONCLUSIONS and RECOMMENDATIONS:

This is an analytical report on a combined airborne geophysical magnetometer and VLF-Electromagnetic survey conducted in August 1984, for Maralgo Mines Ltd., in the Stewart area, Skeena Mining Division, British Columbia. All data from this survey were collected and stored on magnetic tape on an 'on board computer' in flight while conducting the survey. Then these data were read directly into a micro computer. These geophysical data were treated with 'state of the art' enhancement programs to find the most suitable model to effectively analyse the field data and aided in processing all calculations. These results were mapped in contour form and linear form to deduct the most useful information from these field data. All data used in this report has good correlation between the interpreted geophysical linears and structures with known lithology. These zones and exploration targets should be investigated in more detail to explore these zones for possible economic mineralization.

This report should be reviewed by a qualified geophysicist or geologist as it is based on the authors past 30 years field and technical experience and 'state of the art' computer analytical programs.

respectfully submitted,



T. Rolston, Project manager.


CANDELL CONSULTING CORP.

CERTIFICATE OF QUALIFICATIONS

I, Tom Rolston of 615-525 Seymour Street, Vancouver, B.C. state that I have actively been engaged in my profession for 31 years, since 1953, and state as follows:

1. 1953 to 1964 with the R.C.A.F. as instrument and electronic technician with crew supervisory capacity in various electronic and instrument systems.
2. 1964 to 1966 with Kerr-Addison Mines Ltd. as electronic technician, servicing, repairing and maintaining various types of geophysical instruments. Also two seasons as field supervisor and geophysical instrument operator in mining exploration, including airborne and ground geophysical surveys, geochemical surveys, geophysical and geochemical drafting and mapping.
3. 1966 to 1981 with Geotronics Surveys Ltd. and Columbia Geophysical Services Ltd., contracting geophysical/geochemical surveys in close association with geological mining engineers for various mining companies, as exploration manager and field supervisor of geophysical, geochemical surveys and instrument operator of various geophysical instruments such as airborne and ground systems, magnetometer, electromagnetic, gravimeter, self potential meter, scintillometer and induced polarization.
4. 1981 to present as exploration manager with Candell Consulting Corp., geophysical consulting, airborne geophysical services and computer analysis of geophysical data.

Dated at Vancouver British Columbia, this 15 day of OCT, 1984



Tom Rolston, Project manager.

CANDELL CONSULTING CORP.
615-525 SEYMOUR STREET
VANCOUVER B.C. V6B 3H7

* Geophysical Consulting Services *

(604) 683-3830
(604) 526-1732
(604) 687-7711
PAGER 2327
(24 hours)
TELEX: 04-54654

DATE: OCT.22,1984

*** STATEMENT OF ACCOUNT ***

MARALGO MINES LTD.
801-837 West Hastings Street,
Vancouver B.C.
V6C 1B6

Attn. Thornton Donaldson

Re: Combined airborne magnetometer and electromagnetic
geophysical survey on Bitter Creek claim group, Stewart
Mining Division, British Columbia.

Total amount of contract	\$12,750.00
Deposit Jul.18/84	\$ 9,000.00

Balance due on completion of field work	\$ 2,000.00
Balance due on completion of reports	\$ 1,750.00
	=====
	\$12,750.00
	=====
As per contract Balance due to date, on completion of reports.....	\$ 3,750.00
	=====

*CHK 23
OCT 23/84*

* ACCT. STATUS: [CURRENT] [30 DAYS] [60 DAYS] [90 DAYS] [OVER 90]*

* [] [XXXXX] [] [] [] [] *

***** 2% per month charge on overdue accounts. *****

APPENDIX I

RAW DATA HARD COPIES

MAGNETIC and ELECTROMAGNETIC DATA FROM FLIGHT LINE MAP and
DIGITAL/ANALOG COMPUTER STORED DATA

Lines L10N to L16S

FLIGHT LINE: 10N

MAG	AFB	HFB
===	===	===
596	23	66
243	10	54
200	15	70
164	11	54
54	12	54
156	6	50
466	10	70
584	11	58
513	11	59
400	6	59
358	6	43
105	7	54
23	23	58
325	10	56
427	27	82
560	10	70
603	31	129
607	50	152
0	0	0

FLIGHT LINE: ON

MAG	AFS	HFS
-1	-1	-1
3	439	584
3	109	192
43	98	152
3	82	123
129	98	200
215	105	207
337	105	184
102	82	125
3	98	168
133	94	176
15	105	203
3	94	109
145	105	203
239	98	176
317	98	129
243	98	98
286	78	74
501	98	137
350	78	105
354	82	70
-2	-2	-2
27	86	50
3	94	82
3	94	82
3	117	105
3	141	131
145	137	117
498	121	86
532	125	94
603	156	131
532	192	180
282	180	180
3	125	58
75	133	135
82	160	113
86	160	135
486	117	43
415	133	121
584	149	129
541	168	176
458	141	125
388	109	117
541	125	141
610	176	231
611	180	211
303	141	109
82	145	168
286	188	180
458	188	247
576	172	188
615	172	164
623	192	192
627	223	209
584	156	82
588	188	86
423	203	149
427	172	109

MAG	AFS	NFS	FLIGHT LINE:GN
===	===	===	
552	223	160	
596	176	145	
525	184	125	
498	172	137	
584	145	121	
619	98	74	
572	117	125	
576	117	184	
550	189	122	
325	129	149	
176	94	105	
154	117	149	
31	105	150	
121	113	137	
223	113	154	
0	0	0	

FLIGHT LINE: ON

MFB	AFB	HFB
180	6	7
3	6	19
181	6	60
376	6	15
74	7	61
50	6	15
227	6	15
15	6	7
3	6	15
3	6	27
3	6	19
160	6	3
3	6	11
3	6	27
209	6	23
184	6	19
156	6	61
3	6	23
27	6	43
207	6	27
98	6	54
176	6	47
364	6	7
274	6	29
3	6	23
141	6	50
505	6	43
388	6	61
378	6	29
374	6	29
149	7	29
356	6	47
354	6	61
184	6	29
98	6	43
-2	-2	-2
227	11	58
231	7	27
3	6	55
11	15	24
3	15	58
160	11	43
474	13	47
458	11	27
149	27	70
78	23	66
521	51	54
8	8	8

FLIGHT LINE: 7N

MFG	AFB	HFB
===	===	===
-1	-1	-1
040	110	100
040	101	176
006	117	102
020	90	105
060	90	105
008	94	113
006	105	140
004	90	108
006	02	109
406	90	149
021	90	100
440	105	176
102	105	207
000	90	113
415	90	106
405	105	105
002	100	200
076	105	176
047	101	102
000	117	106
015	100	206
008	105	105
406	117	117
403	105	105
010	140	003
117	102	002
006	140	007
000	140	141
403	105	02
101	100	105
-2	-2	-2
100	140	100
070	141	113
070	141	101
005	101	100
015	101	105
027	145	101
405	117	90
005	140	100
403	117	113
007	141	105
145	145	101
000	104	100
000	141	105
411	141	100
000	105	003
015	170	104
007	100	100
007	102	104
001	170	003
001	003	000
007	007	005
010	170	140
000	140	100
007	010	005
007	100	170
005	007	000

FLIGHT LINE:7N

MFG	AFB	HFB
===	===	===
623	233	247
532	254	266
3	219	227
3	188	176
-3	-2	-3
443	192	215
541	164	259
7	145	196
3	133	200
3	117	160
137	189	188
3	152	239
3	189	219
470	189	141
462	189	196
483	145	274
164	125	235
3	129	180
164	149	215
490	149	254
501	188	301
300	188	270
62	207	329
62	188	317
11	188	333
219	235	403
503	207	309
549	125	231
521	70	145
321	70	192
0	0	0

FLIGHT LINE:6N

MAG	AFS	HFB
156	6	6
6	6	15
6	6	7
6	6	19
15	6	15
6	6	69
6	6	7
116	6	58
274	6	6
117	6	25
202	6	19
99	6	6
6	6	7
117	6	6
149	6	7
117	6	15
258	6	22
262	6	19
180	6	31
450	6	22
207	7	47
6	6	6
6	6	6
-6	6	-6
94	6	19
201	6	6
211	6	22
6	6	31
6	6	19
6	6	15
6	6	15
182	6	22
149	6	54
290	6	6
223	6	15
105	6	19
78	6	22
6	6	6
6	6	27
180	6	19
372	6	22
253	6	11
192	6	27
105	6	15
6	7	19
62	6	7
254	6	19
222	6	68
264	6	11
256	6	11
450	6	27
259	6	15
6	6	13
6	6	13
78	6	13
62	6	22
11	6	31
149	6	11

FLIGHT LINE: EN

MAG	AFB	HFB
===	===	===
-1	-1	-1
3	376	585
62	55	61
207	31	83
211	59	90
341	43	82
352	35	66
274	27	62
223	31	105
262	43	141
294	43	86
207	35	86
223	35	90
43	50	141
3	54	149
50	50	78
388	43	47
356	58	129
392	74	129
94	70	109
31	47	39
381	66	78
370	82	141
266	82	109
213	70	62
385	54	50
447	74	86
360	94	106
47	90	82
200	70	70
486	78	98
341	94	129
600	98	105
619	70	50
627	66	39
627	78	78
631	90	125
607	66	39
611	66	54
631	70	74
466	90	129
192	94	86
3	74	70
90	82	50
276	90	70
696	105	78
90	90	43
227	62	19
356	66	39
356	82	31
239	78	58
207	58	3
50	82	50
62	94	105
176	109	137
-2	-2	-2
3	90	109
86	78	90

MAG	AFB	HFB	FLIGHT LINE:EN
===	===	===	
106	82	125	
106	98	188	
145	98	168	
78	86	125	
106	86	121	
227	94	188	
254	125	227	
487	189	211	
458	86	168	
554	78	172	
489	94	196	
552	105	247	
3	82	184	
3	78	172	
215	74	207	
243	78	227	
39	82	258	
109	82	196	
254	74	176	
207	82	298	
3	105	258	
3	98	235	
15	117	219	
176	133	305	
125	145	400	
206	168	423	
201	129	358	
3	113	298	
23	109	364	
43	121	403	
258	113	345	
258	105	301	
184	105	231	
482	98	305	
309	82	298	
3	58	274	
154	39	258	
78	39	243	
3	58	309	
3	82	329	
0	0	0	

FLIGHT LINE:4N

MAG	AFB	HFB
===	===	===
145	0	105
060	0	86
208	0	105
192	0	105
164	0	98
0	0	0
274	0	86
376	0	74
247	0	66
121	0	70
274	0	117
180	0	74
0	0	82
204	0	94
239	0	78
0	0	78
196	0	58
247	0	82
247	0	82
274	7	86
298	11	58
231	11	90
86	15	74
0	15	86
0	11	70
204	15	54
219	11	50
262	11	70
419	11	90
458	7	86
360	11	70
231	11	78
98	0	78
94	7	90
298	0	74
247	11	94
98	7	62
192	0	66
27	0	74
105	0	58
109	0	58
82	0	50
0	0	74
113	7	43
298	0	58
0	0	50
0	0	70
35	7	66
125	7	50
0	0	70
0	0	78
274	0	70
125	11	74
0	0	86
0	0	66
0	0	66
0	7	78
192	11	94

FLIGHT LINE:4N

MAG	RF6	HF6
06	0	02
6	0	70
6	0	06
46	7	06
47	11	90
6	0	90
6	0	02
066	7	06
060	11	02
010	7	90
041	0	02
007	0	70
121	0	70
100	7	90
172	0	70
001	0	105
0	0	74
0	0	105
02	0	02
0	0	06
0	0	70
0	0	06
001	0	50
000	0	02
00	0	50
007	0	00
406	0	54
507	7	47
500	7	09
274	7	01
0	7	27
0	10	05
0	0	0

FLIGHT LINE:3N

MFB	AFB	HFB
===	===	===
-1	-1	-1
517	55	55
266	55	52
184	51	58
172	57	58
592	53	58
258	52	58
141	57	153
278	53	117
553	53	153
615	19	157
623	23	158
337	27	152
129	23	137
358	23	153
372	31	145
368	31	180
313	35	158
280	35	141
282	35	125
305	43	145
350	43	145
227	43	152
39	50	152
388	50	137
454	50	141
149	54	136
189	58	136
487	54	149
433	54	132
184	58	184
141	58	200
589	54	145
-2	-2	-2
627	54	139
633	54	180
627	58	231
631	54	184
649	54	145
635	58	157
631	54	176
631	58	200
632	58	184
265	47	113
525	58	113
619	62	211
623	65	219
411	66	176
247	54	185
517	58	94
611	74	274
627	78	266
623	62	255
633	62	185
625	96	254
631	105	356
625	98	321
639	74	254

MFG	AFB	MFG	FLIGHT LINE:EN
===	===	===	
661	78	200	
661	98	204	
669	58	208	
668	74	247	
648	66	200	
3	78	250	
3	98	329	
3	105	337	
581	98	321	
3	66	235	
3	82	325	
3	98	427	
3	82	329	
3	58	329	
3	58	278	
3	74	411	
549	78	352	
898	58	333	
1000	58	341	
981	78	400	
27	74	407	
3	66	392	
250	62	356	
898	54	392	
1000	62	505	
175	58	439	
3	58	443	
239	54	423	
760	66	498	
674	74	431	
698	78	400	
890	74	286	
894	78	376	
894	78	501	
113	66	450	
3	62	388	
548	78	388	
549	66	466	
583	66	498	
3	62	462	
3	62	466	
3	62	466	
47	78	545	
231	62	490	
654	58	498	
981	43	462	
768	58	560	
596	74	619	
-3	-3	-3	
627	94	631	
666	98	392	
792	152	1000	
764	156	1000	
529	152	1000	
611	33	501	
647	13	556	
486	11	523	
600	11	521	

FLIGHT LINE:EN

MAG	REF	HFB
010	070	000
000	10	000
000	11	041
000	7	040
000	7	000
000	0	000
000	0	007
000	0	000
000	0	041
000	0	001
000	0	000
000	0	040
000	0	000
000	0	000
000	0	007
000	0	040
000	0	041
000	0	040
000	0	400
000	0	000
010	0	070
400	0	007
000	0	000
010	0	000
000	47	000
000	00	1000
000	00	1000
040	00	070
070	0	004
040	00	1000
041	0	401
000	0	1000
000	04	040
000	7	004
000	0	104
010	0	001
400	0	000
001	0	000
007	0	000
400	0	170
000	0	000
040	0	040
000	0	007
404	0	104
410	0	117
400	0	117
070	0	104
440	0	170
040	0	141
040	0	141
040	0	104
404	0	100
000	0	170
000	0	100
000	0	140
001	0	100

FLIGHT LINE: 2N

MAG	RF8	HFB
===	===	===
341	6	149
400	6	107
506	6	106
619	6	106
601	6	106
621	6	107
460	6	102
506	6	98
619	6	110
508	6	117
505	6	105
572	6	117
620	6	117
504	6	109
400	6	105
521	6	105
517	6	98
—4	—4	—4
506	6	94
627	6	113
605	6	109
601	6	105
627	11	86
605	10	109
500	10	117
503	10	98
600	20	98
508	31	70
517	31	113
505	10	105
501	11	105
505	7	100
443	11	113
407	15	105
500	11	109
623	11	117
601	7	98
504	15	109
517	20	98
274	30	62
206	30	109
404	3	74
507	6	15
376	10	98
202	31	105
505	20	98
415	6	31
321	7	98
507	7	86
619	20	86
505	7	105
572	7	82
504	11	82
407	10	98
308	10	82
540	11	94
619	10	98
506	7	70

FLIGHT LINE: 2N

MAG	AFB	HFB
===	===	===
558	15	86
611	15	105
403	11	98
325	11	105
555	11	58
555	10	98
481	7	86
172	3	58
54	5	113
325	10	86
555	10	98
554	11	105
558	11	113
552	15	74
607	15	117
610	11	105
623	11	105
623	7	58
474	11	94
396	7	98
555	7	113
498	3	82
415	3	78
555	7	86
596	3	78
525	3	98
403	3	82
317	7	66
352	7	82
384	3	74
55	3	78
0	0	0

FLIGHT LINE:IN

FFF	FFF	FFF
-1	-1	-1
009	157	202
004	211	403
037	207	505
017	323	615
011	274	494
000	235	409
005	207	498
010	266	600
006	164	450
019	231	505
001	211	462
001	215	568
004	300	764
001	294	623
004	290	513
019	235	592
001	247	529
001	349	568
001	270	490
005	215	466
008	203	611
411	286	611
408	223	521
006	243	537
076	164	521
015	200	533
027	203	552
005	192	576
005	227	513
001	160	580
005	176	584
005	152	545
005	207	627
005	188	572
005	160	721
005	168	674
040	180	619
047	200	656
005	160	701
023	213	725
001	270	721
005	321	917
001	309	803
010	286	784
027	309	713
107	239	815
100	184	737
005	200	776
494	235	800
410	200	741
106	250	764
0	192	760
0	274	764
000	274	823
011	317	913
001	245	1000
000	270	1000

MAG	AFS	HFS	FLIGHT LINE:IN
===	===	===	
060	258	1000	
040	321	1000	
060	184	1000	
060	260	1000	
060	188	1000	
060	164	1000	
040	192	1000	
060	180	1000	
060	31	596	
060	62	611	
060	117	1000	
060	74	1000	
060	156	1000	
584	109	1000	
568	43	807	
564	35	968	
568	31	1000	
568	11	752	
517	31	721	
180	7	635	
3	3	674	
243	3	717	
208	7	729	
39	19	701	
-2	-2	-2	
3	19	823	
3	23	764	
3	35	658	
3	54	584	
3	66	588	
3	70	815	
3	78	749	
3	94	721	
58	94	615	
3	66	615	
3	66	737	
3	74	682	
3	90	423	
3	90	380	
3	74	564	
568	62	607	
615	100	623	
631	125	568	
630	133	525	
630	135	572	
630	140	713	
630	184	717	
-3	-3	-3	
630	200	572	
630	196	619	
630	184	603	
630	203	788	
630	192	607	
631	184	635	
630	166	517	
630	160	576	
0	0	0	

FLIGHT LINE:0

MAG	AFB	HFB
===	===	===
-1	-1	-1
470	470	549
498	105	270
498	105	254
498	105	262
501	98	247
498	113	286
498	113	301
498	105	290
498	109	282
498	98	266
498	113	282
501	117	376
498	117	389
501	94	254
498	121	321
498	117	341
501	121	372
498	172	443
501	105	258
498	152	407
498	133	447
501	219	552
498	172	411
501	158	423
498	188	494
498	164	529
498	266	615
501	164	458
498	243	505
501	227	549
498	243	627
501	282	643
498	149	435
501	274	600
501	203	584
-2	-2	-2
498	235	600
501	160	447
498	200	541
494	250	592
490	180	564
494	250	678
498	149	431
498	215	564
501	203	623
498	215	639
501	254	627
501	137	411
498	309	701
498	235	674
505	266	658
505	184	498
498	184	529
494	176	549
505	258	662
505	192	564
498	141	513

FLIGHT LINE: 0

MAG	AFB	HFB
===	===	===
498	219	680
498	176	687
501	168	588
498	168	564
498	227	678
498	227	678
505	141	623
505	141	680
505	120	576
501	220	701
498	168	650
498	168	776
494	250	835
498	188	713
501	231	850
501	215	839
501	172	784
501	252	917
501	182	627
501	274	831
498	196	862
501	242	854
505	226	925
498	215	752
498	301	984
501	231	933
505	266	925
505	192	905
501	345	1000
501	349	1000
-3	-3	-3
501	301	901
501	184	823
505	258	996
501	337	1000
501	243	945
505	258	807
501	301	1000
505	329	1000
501	243	1000
505	184	858
505	192	717
501	188	878
505	211	960
505	160	866
505	133	647
505	117	592
505	125	874
505	113	925
505	70	784
505	58	498
505	54	513
505	50	752
501	39	803
505	39	588
505	50	498
505	54	698
505	47	858

MAG	AFB	HFB	FLIGHT LINE:0
===	===	===	
505	27	854	
505	27	631	
505	27	611	
505	23	760	
505	19	811	
505	39	603	
505	54	550	
505	47	635	
505	31	815	
-4	-4	-4	
505	35	725	
505	47	656	
505	58	564	
505	62	811	
505	50	870	
505	82	635	
505	90	596	
505	113	619	
505	113	803	
505	109	847	
505	125	678	
505	125	709	
505	145	709	
505	105	1000	
505	125	858	
505	113	874	
505	158	760	
505	156	1000	
505	137	1000	
505	188	972	
505	180	966	
505	215	839	
505	196	1000	
505	231	1000	
505	239	1000	
-5	-5	-5	
505	294	956	
505	294	972	
505	243	1000	
505	274	1000	
505	262	1000	
505	286	1000	
505	317	1000	
505	235	1000	
505	243	1000	
0	0	0	

FLIGHT LINE: 16

MAG	AFB	HFB
---	---	---
-1	-1	-1
483	619	568
481	54	482
481	185	215
481	184	149
481	121	317
427	247	121
427	51	541
481	117	58
481	133	117
481	145	258
481	227	168
481	23	211
481	98	58
481	155	184
481	145	262
481	133	137
481	7	266
481	98	62
481	86	231
481	133	282
485	98	176
485	31	211
485	78	82
485	62	254
485	145	301
481	94	132
485	58	121
485	78	137
-2	-2	-2
485	33	235
485	86	243
485	3	192
485	31	109
485	23	200
485	11	270
481	54	254
485	3	231
485	23	168
485	7	243
485	3	294
485	27	207
485	3	207
485	3	152
485	3	278
485	31	262
481	3	168
485	3	168
485	3	164
485	3	250
485	3	188
485	3	121
485	3	113
485	3	164
485	35	219
485	3	94
485	35	189
-3	-3	-3

FLIGHT LINE #16

MAG	AFB	HFB
===	===	===
405	66	146
405	11	125
405	19	113
405	3	58
405	74	287
405	23	149
405	82	294
405	7	74
405	11	74
405	35	192
405	3	74
405	52	313
405	3	39
405	43	211
405	78	274
405	43	333
405	19	262
405	3	152
405	66	349
405	54	341
405	185	482
405	109	298
405	3	58
405	74	423
405	58	301
405	129	452
405	19	203
405	11	180
405	43	329
405	50	301
405	94	400
405	3	3
405	66	252
405	39	180
405	176	424
405	50	176
405	3	3
405	31	168
405	7	125
405	66	227
405	3	3
405	31	157
405	3	66
405	54	286
405	3	66
405	3	11
405	15	146
405	35	180
405	3	62
405	3	19
405	45	125
405	31	164
405	3	46
405	3	185
405	19	185
-4	-4	-4
405	27	268
405	7	90

FLIGHT LINE: 15

MFB	APB	MFB
435	27	192
435	42	247
435	7	113
435	3	78
3	21	184
3	27	160
3	7	121
3	3	3
3	3	105
38	3	78
619	3	121
659	3	15
435	3	54
537	7	145
705	3	105
549	3	105
376	3	39
117	3	149
3	3	105
168	15	200
3	23	207
313	3	3
341	3	98
509	3	90
498	3	125
549	3	145
639	3	188
682	3	117
709	3	164
768	3	62
721	3	47
419	3	188
439	7	180
478	7	109
780	27	156
784	3	47
694	3	105
537	15	168
556	3	105
768	3	74
789	3	3
576	3	19
584	3	105
580	15	133
611	3	135
470	3	39
443	3	34
611	3	62
694	7	121
552	35	176
367	3	58
583	3	3
592	3	50
435	23	125
521	3	74
658	3	3
615	3	27
592	3	94

FLIGHT LINE#18

MFG	AFS	MFG
===	===	===
486	W	117
537	W	7
576	W	7
756	W	39
717	W	74
994	W	117
713	W	19
670	W	7
682	W	23
482	W	78
451	W	137
298	W	66
581	W	3
687	W	19
582	W	78
168	W	135
819	W	59
780	W	15
721	W	62
658	W	99
611	W	35
588	W	27
619	W	62
585	W	54
582	W	62
638	W	31
615	W	39
639	W	47
576	W	54
15	W	15
682	W	58
0	W	0

FLIGHT LINE: 20

MAG	AFS	HFS
===	===	===
-1	-1	-1
666	488	752
682	47	269
729	31	192
725	31	172
674	39	223
607	42	266
588	47	239
568	19	160
725	47	243
749	43	270
803	62	325
780	54	239
929	27	196
996	58	262
501	58	317
411	62	341
556	23	121
925	23	117
1000	50	254
1000	62	364
1000	70	368
1000	50	207
1000	3	86
1000	19	141
1000	94	400
1000	103	450
1000	62	247
1000	39	219
1000	98	431
1000	103	450
1000	109	447
1000	50	196
1000	105	352
1000	109	443
1000	125	537
1000	149	486
1000	70	258
1000	137	419
1000	133	517
1000	203	576
1000	58	207
1000	43	211
1000	176	498
1000	168	631
1000	203	635
1000	62	231
1000	105	356
1000	203	666
1000	200	619
1000	258	709
1000	86	270
1000	219	600
1000	184	737
1000	227	639
984	184	549
749	86	313
505	215	670

FLIGHT LINE:25

MFG	AFS	HFB
===	===	===
488	168	615
517	258	674
585	168	482
494	188	584
462	184	588
242	287	576
592	227	588
461	141	589
19	283	627
29	141	592
-2	-2	-2
113	188	568
164	145	486
423	184	588
478	176	678
488	168	607
482	223	652
462	164	600
488	262	741
488	188	631
439	196	658
462	164	615
3	152	588
3	287	789
443	152	733
3	196	698
3	149	682
176	196	749
3	152	713
3	149	686
3	219	721
3	213	847
3	286	917
3	188	831
3	168	678
3	168	713
-3	-3	-3
3	215	921
3	213	925
3	184	752
3	188	662
3	192	760
3	247	956
3	258	1000
3	288	749
3	288	615
3	196	666
352	227	870
443	215	796
1888	287	615
1888	213	568
1888	247	666
1888	219	858
1888	188	788
749	121	581
488	125	494
517	149	564
585	168	688

FLIGHT LINE:25

MAG	AFB	HFB
501	100	627
501	98	490
498	100	396
501	125	439
1000	125	552
513	100	521
364	98	470
608	98	407
521	98	454
500	74	513
427	70	411
431	100	349
423	125	376
419	149	500
423	154	629
431	145	402
431	64	388
431	88	525
431	66	529
435	27	537
435	19	435
431	23	362
431	7	455
431	3	419
-4	-4	-4
431	11	300
431	11	278
431	15	388
431	7	466
431	11	466
435	30	415
435	30	388
435	11	521
435	19	552
435	26	411
435	19	376
431	11	415
423	7	450
419	6	450
419	15	368
415	19	341
407	61	419
403	27	545
411	30	545
435	70	415
443	58	609
423	58	533
415	54	588
415	74	513
415	58	549
419	62	603
419	58	600
415	66	541
411	62	404
400	56	584
400	78	674
411	82	631
419	100	529

FLIGHT LINE:25

MFB	AFB	HFB
419	112	592
419	167	517
411	121	823
411	152	670
411	136	647
400	164	627
368	164	717
345	129	823
388	176	643
3	164	807
3	211	627
3	227	941
298	184	839
388	227	678
415	215	776
419	219	800
423	172	556
423	219	713
-5	-5	-5
400	247	705
356	270	847
419	266	1000
3	258	992
3	290	839
39	270	984
337	305	941
407	254	1000
423	294	1000
3	278	980
3	298	1000
3	258	1000
3	223	1000
298	274	1000
380	3	874
3	3	850
3	3	996
3	3	1000
321	3	792
407	203	682
419	196	611
415	184	964
427	184	870
425	227	721
421	223	623
388	211	768
356	192	847
396	188	850
415	203	662
0	0	0

MAG	AFB	HFB
---	---	---
-1	-1	-1
407	411	584
427	58	454
431	58	172
439	185	258
435	185	113
411	58	262
411	58	270
435	154	74
443	141	239
431	180	185
431	94	270
439	139	94
435	145	56
141	133	152
3	164	185
254	74	172
392	133	58
431	185	152
439	199	149
435	139	133
439	113	129
447	137	137
-2	-2	-2
415	129	203
407	117	113
431	70	90
423	56	86
419	185	86
423	70	207
423	94	180
407	54	196
407	58	215
-3	-3	-3
423	94	172
435	90	188
439	185	113
435	15	243
423	47	74
423	50	160
439	70	117
3	54	78
3	11	160
203	35	137
3	58	152
3	74	129
262	15	185
388	3	98
407	55	109
411	47	175
415	47	78
419	3	215
435	3	113
419	15	117
388	185	301
423	7	82
435	3	258
423	7	56

FLIGHT LINE:35

1958	1959	1958
0	00	132
0	06	168
208	7	176
0	11	145
0	50	129
117	40	215
0	00	150
0	0	145
0	7	125
0	25	172
215	40	133
369	7	117
0	0	180
0	11	129
0	11	180
213	7	137
300	0	137
-4	-4	-4
431	0	121
443	11	121
158	0	141
0	0	137
325	0	156
403	7	86
427	0	145
435	0	125
443	0	125
443	0	62
0	0	74
0	0	133
0	0	125
300	0	98
388	7	82
415	0	133
423	7	117
415	0	94
388	01	39
000	00	98
415	02	141
000	117	156
000	0	15
000	7	63
130	27	63
0	0	117
0	0	55
000	0	82
047	0	70
0	15	47
0	0	86
0	7	54
0	10	43
0	04	39
210	00	51
072	70	00
0	10	10
0	01	51
0	01	10
0	02	27

FLIGHT LINE: 88

MFB	AFB	MFB
208	7	27
3	3	27
3	10	3
3	3	47
286	3	19
384	7	43
419	3	58
411	3	47
100	3	33
3	10	43
3	7	109
105	3	54
329	3	27
393	3	27
400	94	19
3	35	211
3	3	98
150	76	3
223	35	113
184	35	74
3	3	78
3	31	23
3	11	56
282	27	94
375	15	105
3	11	82
3	31	58
3	3	121
258	11	55
376	3	98
3	3	31
3	3	11
3	3	38
313	3	100
332	3	34
423	3	38
450	3	86
454	10	80
454	3	100
454	3	34
454	3	27
454	3	38
454	47	223
458	23	133
458	5	3
454	3	31
458	11	123
454	47	215
454	11	94
454	3	3
454	3	113
454	3	74
458	31	132
3	3	3
3	3	43
3	27	104
3	3	82
3	23	102

FLIGHT LINE 138

MAG	AFB	HFB
74	3	39
356	3	62
427	7	125
447	27	156
450	11	156
450	3	3
447	3	19
447	3	105
447	3	121
450	3	94
450	3	3
450	3	98
450	3	62
450	3	113
450	3	65
447	3	39
447	3	34
447	3	47
447	3	131
447	3	58
435	3	78
439	3	50
443	3	117
447	3	121
447	3	3
447	3	34
447	3	78
443	10	141
443	3	160
443	3	23
447	3	78
447	3	86
447	11	172
447	3	152
450	3	70
447	3	145
447	3	98
443	3	200
443	3	74
443	3	105
443	3	102
443	3	123
443	3	121
443	3	70
443	3	153
443	3	117
443	11	147
443	3	149
447	3	58
443	3	90
450	3	169
3	3	125
3	3	43
3	3	62
3	3	74
3	3	105
3	3	70
3	3	58

MAG
|||
3
0

FFG
|||
4
0

FFG
|||
5
0

FLIGHT LINE: 35

FLIGHT LINE: 48

MAG	AFB	HFB
===	===	===
-1	-1	-1
274	415	756
600	54	258
541	62	247
494	54	270
580	70	317
641	66	317
184	62	301
272	62	239
470	74	313
498	70	325
483	70	305
533	70	262
611	66	274
760	66	301
643	74	317
905	66	231
1000	62	243
1000	54	278
1000	74	360
-2	-2	-2
1000	54	203
1000	62	172
1000	58	333
1000	58	274
1000	105	419
1000	70	215
954	54	227
1000	70	333
1000	117	419
1000	94	336
1000	54	129
1000	66	294
1000	78	329
1000	141	466
505	70	266
686	70	192
792	78	360
494	129	454
498	105	400
443	78	254
3	94	305
3	105	443
525	164	509
250	82	349
364	86	223
639	113	439
745	105	407
749	172	521
494	86	403
3	98	298
3	82	360
3	145	517
3	129	580
3	94	268
3	98	278
3	109	454
3	168	603

MAG	DFB	HFB	FLIGHT LINE:45
===	===	===	
6	94	465	
6	86	266	
6	109	349	
6	133	589	
6	133	623	
239	105	483	
670	98	239	
760	121	352	
768	176	600	
427	145	537	
78	129	309	
121	156	321	
576	215	585	
482	211	792	
494	160	556	
623	125	301	
701	125	309	
447	121	501	
552	98	521	
576	78	349	
666	74	235	
972	90	270	
1000	109	443	
1000	109	466	
1000	105	360	
725	141	301	
650	160	458	
709	164	556	
901	164	498	
913	145	482	
-3	-3	-3	
717	196	501	
588	227	623	
795	200	694	
662	207	600	
690	184	529	
611	168	552	
572	125	462	
607	74	403	
643	58	301	
482	70	243	
494	58	278	
745	54	333	
737	47	317	
615	54	247	
533	62	172	
635	78	329	
709	86	470	
725	78	447	
666	74	345	
604	90	309	
686	78	388	
427	47	498	
356	35	364	
533	47	274	
658	39	227	
529	15	329	
415	11	325	

MAG	AFB	HFB	FLIGHT LINE: 48
===	===	===	
352	6	286	
341	7	215	
360	11	250	
592	7	298	
687	11	254	
643	11	231	
780	15	247	
-4	-4	-4	
611	15	270	
603	19	350	
752	27	309	
780	39	325	
713	39	400	
831	19	368	
874	43	423	
764	31	392	
623	54	431	
792	58	443	
678	43	501	
807	74	450	
784	78	447	
741	66	403	
749	82	596	
658	105	505	
634	121	545	
988	141	596	
1000	137	627	
1000	129	658	
1000	141	568	
768	141	498	
960	141	505	
1000	152	756	
976	145	662	
823	164	521	
827	164	447	
1000	152	576	
1000	160	796	
898	137	556	
913	133	431	
890	145	396	
764	141	535	
745	145	674	
815	164	494	
705	203	654	
694	231	600	
682	203	737	
721	192	662	
-5	-5	-5	
960	207	535	
936	231	478	
788	247	650	
749	239	788	
909	250	607	
936	262	501	
847	278	505	
627	286	705	
827	290	698	
937	313	658	

FLIGHT LINE:46

MAG	AFS	HFS
===	===	===
792	337	650
933	367	878
933	318	831
768	286	690
658	270	588
494	247	596
588	265	655
662	292	568
541	215	443
623	219	466
556	282	419
0	0	0

FLIGHT LINE: 56

MAG	AFB	HFB
---	---	---
-1	-1	-1
772	419	556
525	62	152
525	62	157
568	74	164
519	98	200
525	105	149
227	113	98
454	117	189
780	129	184
819	125	219
478	139	185
533	121	325
674	141	298
501	145	184
486	117	184
803	98	58
941	94	301
721	125	109
627	137	254
647	133	145
690	105	196
780	109	301
674	133	125
600	125	247
545	105	58
758	82	274
745	82	141
-2	-2	-2
635	94	150
631	78	156
666	98	105
576	43	235
831	58	78
627	74	156
789	105	227
686	117	129
803	27	250
721	66	117
560	70	168
576	74	176
603	35	141
-3	-3	-3
545	39	227
635	39	105
725	35	188
736	66	139
737	27	172
501	31	39
807	27	105
588	27	121
803	27	70
1000	3	35
802	23	35
839	15	98
815	35	109
785	11	39
898	3	137

FLIGHT LINE: 59

MAG	AFB	HFB
===	===	===
882	19	38
741	59	133
615	74	205
758	35	141
917	3	98
784	3	117
656	27	152
791	62	250
533	3	38
549	3	121
937	3	94
834	43	160
581	74	286
435	27	113
443	3	86
266	3	193
294	23	180
62	62	211
278	3	82
433	3	98
521	3	137
556	27	223
674	7	141
678	3	152
688	3	143
729	3	183
713	3	245
776	3	211
887	3	125
743	3	86
634	3	282
586	3	227
536	3	114
523	3	54
435	3	86
585	3	141
227	3	183
219	3	86
282	3	11
125	3	193
356	10	184
233	3	50
3	3	62
3	7	78
337	15	143
258	31	86
431	3	62
564	3	62
-4	-4	-4
674	3	54
558	3	125
274	3	58
141	3	82
3	3	7
3	7	125
411	34	152
223	3	58
3	3	54

MAG	AFB	HFB	FLIGHT LINE:56
===	===	===	
62	26	29	
354	25	98	
286	117	122	
694	3	125	
176	19	7	
215	24	58	
686	86	94	
662	86	54	
584	15	23	
698	43	3	
729	47	39	
870	66	43	
788	39	35	
949	3	62	
996	31	39	
741	35	43	
709	47	70	
737	11	47	
811	3	66	
760	19	43	
721	3	74	
811	7	54	
752	3	43	
701	3	39	
803	3	62	
690	3	35	
619	3	39	
474	3	23	
611	50	39	
635	7	27	
556	11	31	
654	15	19	
733	3	23	
-5	-5	-5	
698	15	23	
611	31	70	
549	3	23	
647	3	27	
760	3	23	
792	3	11	
815	2	27	
874	3	39	
858	3	31	
736	3	27	
960	3	31	
1000	3	66	
796	3	23	
792	3	19	
996	3	23	
827	3	23	
684	15	86	
643	3	25	
686	3	3	
717	3	23	
678	3	31	
925	7	70	
1000	3	19	
960	3	15	

FLIGHT LINE:55

MAG	ATG	HTG
===	===	===
784	0	10
670	0	10
682	0	10
776	0	35
658	0	43
713	0	15
788	0	78
631	0	10
666	0	54
729	0	11
-6	0	-6
713	0	58
654	0	35
796	0	10
749	0	11
815	0	31
886	0	35
807	0	23
701	0	31
792	0	27
729	0	74
741	0	70
749	0	23
792	0	43
776	0	27
768	11	109
737	3	7
670	0	23
635	0	43
749	0	31
768	0	74
690	0	7
686	0	11
721	0	19
729	0	43
811	0	27
831	0	43
921	0	27
756	0	31
725	0	74
760	0	31
713	0	15
701	0	47
847	0	62
776	0	47
788	0	27
709	0	39
552	0	27
643	0	39
776	0	35
701	0	47
823	0	39
792	0	31
713	0	47
709	0	39
639	0	39
631	0	31
600	0	35

MAG
===
0

AFB
===
0

HFS
===
0

FLIGHT LINE:56

FLIGHT LINE: 78

MAG	AFB	AFB
-1	-1	-1
996	7	821
850	11	82
733	11	82
705	11	86
674	15	98
596	15	98
615	7	70
678	11	98
768	11	98
870	15	113
866	27	121
717	27	125
690	19	117
666	23	137
717	31	125
968	31	121
980	35	133
788	35	125
827	31	94
850	35	98
745	23	133
827	31	122
854	27	125
564	31	117
615	31	160
772	31	164
772	31	129
635	27	125
803	35	145
1000	31	137
929	50	207
643	31	82
996	31	50
1000	27	156
1000	58	231
1000	50	207
1000	39	94
1000	31	98
1000	23	164
1000	105	305
1000	35	125
1000	39	66
1000	47	192
1000	82	282
1000	74	282
1000	50	152
1000	47	141
1000	50	211
1000	90	313
1000	58	196
1000	50	125
1000	62	192
1000	109	388
1000	98	333
1000	74	215
1000	62	196
-2	-2	-2

MAG	AFS	HFS	FLIGHT LINE:79
===	===	===	
835	66	231	
658	94	488	
698	78	364	
925	54	188	
839	62	156	
835	98	364	
854	98	450	
725	78	325	
789	70	223	
847	82	258	
937	94	321	
968	70	384	
839	58	274	
733	74	223	
588	82	254	
768	125	529	
874	189	407	
745	113	266	
678	145	398	
639	168	392	
658	176	585	
575	172	356	
725	137	262	
741	129	317	
862	117	470	
788	78	388	
776	74	243	
796	78	243	
772	74	384	
-3	-3	-3	
717	54	435	
803	86	325	
886	105	381	
776	129	376	
882	141	462	
921	129	585	
768	149	388	
639	149	400	
796	172	423	
721	164	458	
478	164	427	
584	207	439	
666	164	376	
737	207	313	
796	188	498	
662	176	470	
717	176	407	
674	184	419	
686	188	450	
586	141	537	
529	125	396	
608	94	381	
509	117	286	
447	94	352	
517	82	352	
635	62	282	
694	62	203	
549	58	235	

FLIGHT LINE:75

MFB	AFB	MFB
749	35	298
819	35	219
894	46	152
776	58	188
687	54	367
572	46	278
764	31	254
729	27	262
588	19	227
1000	15	252
858	15	243
808	19	239
-4	-4	-4
894	23	282
870	27	290
874	35	243
658	43	294
690	58	309
768	62	368
752	65	372
788	74	352
811	82	388
874	86	439
874	94	278
898	105	352
984	105	345
921	133	388
815	133	411
945	141	423
1000	137	411
886	153	392
803	117	466
768	109	423
964	105	337
1000	121	278
781	113	345
686	109	443
929	105	349
937	121	239
721	133	294
717	133	384
764	152	585
858	168	388
764	192	447
917	164	298
1000	223	666
976	196	541
827	192	458
-5	-5	-5
894	208	356
941	219	341
772	239	631
883	258	396
988	278	419
972	278	364
827	294	611
882	305	631
1000	298	572

MAG
===
1000
958
701
0

AFB
===
286
301
329
0

MFB
===
392
423
635
0

FLIGHT LINE 175

FLIGHT LINE:00

MAG	AFB	HFB
---	---	---
-1	-1	-1
745	474	494
835	133	176
839	117	184
917	98	185
811	98	200
498	113	47
549	117	164
696	113	168
687	113	172
925	105	117
1000	101	176
792	101	180
698	113	207
811	86	164
729	78	176
737	78	196
768	62	125
784	58	137
949	59	168
1000	54	58
996	47	94
878	39	129
989	39	129
917	31	156
-2	-2	-2
658	19	82
745	15	58
839	19	82
858	15	121
815	15	141
513	15	70
600	15	125
800	11	58
831	15	58
733	15	105
894	31	43
1000	19	113
1000	19	86
729	15	54
701	3	74
729	3	90
764	3	70
819	3	86
780	3	78
917	3	98
1000	3	70
858	3	86
682	3	74
658	3	133
811	3	86
823	3	86
853	3	66
886	3	82
1000	3	43
964	3	54
-3	-3	-3
854	3	78

FLIGHT LINE: 88

MFB	AFB	MFB
===	===	===
807	6	68
737	6	66
568	6	82
764	6	54
721	6	82
588	6	82
498	6	82
600	6	74
494	6	58
627	11	31
683	15	78
641	6	78
596	11	78
149	59	15
3	54	54
3	48	66
3	51	15
11	7	58
589	68	3
608	62	62
898	54	47
913	27	86
682	48	86
478	47	58
678	59	39
737	23	35
785	11	47
713	7	43
792	31	7
945	3	43
1000	3	35
1000	3	43
887	3	23
729	3	11
772	3	31
772	7	3
764	3	62
749	3	23
815	3	38
784	3	19
835	3	23
-4	-4	-4
989	3	27
1000	3	27
1000	3	31
796	3	7
854	3	54
866	19	35
737	51	39
698	39	7
678	23	26
635	19	19
678	48	15
694	53	19
631	78	121
887	6	3
823	6	3
888	19	11

FLIGHT LINE: 98

MAG	RF8	MF8
---	---	---
-1	-1	-1
1000	372	529
1000	27	98
996	27	98
878	38	98
690	58	156
785	58	125
886	47	105
1000	47	117
995	82	184
643	66	176
752	70	113
1000	82	176
1000	105	258
1000	105	250
1000	117	176
1000	125	145
1000	133	215
768	135	274
721	94	207
-2	-2	-2
576	66	163
466	62	163
460	58	172
470	62	278
480	74	192
683	82	172
682	98	219
685	98	266
621	94	227
480	98	211
480	98	215
541	113	381
478	109	349
650	98	204
866	74	208
811	98	208
996	145	447
917	121	419
925	133	625
404	125	633
625	172	317
917	196	674
676	192	427
652	160	443
694	176	385
821	136	606
649	104	572
623	152	652
611	164	282
681	160	247
680	137	443
411	105	483
419	86	243
266	74	188
280	74	247
215	62	356
94	43	317

MAG	AFB	HFB	FLIGHT LINE: 96
360	46	192	
811	47	121	
517	35	196	
828	27	313	
629	27	215	
-3	-3	-3	
325	27	152	
403	27	149	
356	27	290	
419	19	266	
526	27	196	
862	35	203	
752	35	278	
586	43	333	
623	54	292	
651	66	305	
588	74	278	
745	78	329	
600	78	364	
537	78	305	
638	90	235	
764	105	341	
682	105	380	
584	117	395	
470	109	352	
415	129	313	
674	141	360	
717	145	419	
458	129	423	
680	125	337	
756	117	337	
745	109	356	
454	105	372	
-4	-4	-4	
203	105	321	
160	98	243	
327	105	298	
286	113	376	
125	109	333	
258	121	278	
600	125	301	
854	160	384	
831	152	345	
878	137	301	
835	145	305	
443	145	356	
361	168	384	
603	184	329	
741	227	333	
486	294	478	
465	309	643	
654	301	458	
494	329	490	
400	325	478	
219	298	389	
278	341	572	
384	357	482	
415	321	443	

MAG
===
509
0

AFS
===
301
0

HFS
===
498
0

FLIGHT LINE:98

FLIGHT LINE: 105

MFB	AFB	HFB
---	---	---
-1	-1	-1
560	82	287
583	98	172
581	129	98
575	98	287
717	112	66
755	145	341
721	137	141
643	122	125
525	125	137
513	121	137
256	121	252
341	70	70
545	34	158
564	98	105
517	82	34
619	47	98
607	43	86
634	43	158
485	58	74
568	51	113
-2	-2	-2
721	27	109
830	27	86
784	51	109
652	15	70
462	15	58
596	23	43
682	19	94
784	23	121
-3	-3	-3
498	19	109
372	19	105
458	23	82
588	23	125
482	23	105
589	27	58
568	27	113
585	27	121
498	51	105
781	23	70
623	19	74
568	13	47
674	15	82
568	7	98
568	7	74
529	3	54
627	7	39
789	7	62
678	3	86
627	3	70
584	3	66
474	3	54
615	3	78
611	3	74
580	3	78
454	3	58
537	3	70

FLIGHT LINE: 185

MAG	AFB	HFB
===	===	===
505	6	66
-4	-4	-4
605	6	98
470	6	98
250	6	78
409	6	66
678	6	66
588	6	66
225	6	62
3	7	54
180	11	74
235	11	98
3	15	58
3	35	35
62	43	47
274	31	27
3	23	11
3	27	11
3	43	15
388	62	39
760	78	31
650	74	27
486	35	54
701	35	74
784	39	66
568	39	54
364	43	47
427	27	50
413	27	27
-3	-5	-5
568	19	23
525	11	35
523	15	11
482	3	31
588	7	23
741	7	25
698	7	11
584	7	25
521	7	15
541	11	39
687	11	19
517	7	11
501	3	27
496	3	43
558	3	19
768	3	23
796	3	11
698	3	27
-6	-6	-6
631	11	19
623	7	23
678	7	27
752	19	11
729	15	39
658	23	6
643	27	19
568	23	19
686	7	15

FLIGHT LINE:106

MAG	AFB	HFS
675	11	23
687	7	31
611	6	27
619	6	11
637	6	8
684	6	7
617	6	10
678	6	15
883	6	11
847	6	5
741	6	10
756	6	10
0	0	0

FLIGHT LINE: 119

MAG	AFB	HFB
---	---	---
-1	-1	-1
662	360	411
592	19	50
439	27	66
552	31	66
545	39	66
478	35	50
564	39	70
490	50	82
462	54	86
427	66	98
411	66	82
501	90	113
643	82	149
674	82	113
549	82	121
-2	-2	-2
533	70	78
427	66	82
388	66	86
368	74	74
521	78	94
615	82	86
615	78	109
502	74	94
298	70	86
456	70	105
396	70	121
400	70	149
400	66	109
505	82	105
494	82	149
446	98	149
549	98	152
729	105	141
661	98	137
427	105	134
389	105	137
427	98	149
470	98	117
560	98	113
615	86	164
560	82	121
-3	-3	-3
529	86	137
596	98	156
705	117	209
585	121	258
643	136	141
745	141	129
483	168	203
160	168	345
298	145	349
600	133	243
576	125	172
227	113	105
498	105	505
737	82	231

FLIGHT LINE: 118

MFB	AFB	HFB
647	56	102
458	56	157
621	54	259
137	47	227
152	55	208
210	31	129
255	27	145
388	27	62
313	15	121
381	19	117
321	19	113
-4	-4	-4
615	19	98
752	15	98
662	23	129
585	31	70
466	35	152
709	35	109
674	39	149
388	47	188
486	54	156
545	58	203
623	62	203
780	74	219
768	78	203
769	90	254
568	90	252
365	90	231
368	86	219
361	90	243
623	96	274
615	98	301
576	105	219
585	105	196
456	103	270
533	117	301
756	113	266
586	113	262
521	117	259
627	105	282
-5	-5	-5
647	105	252
478	98	256
545	105	258
523	98	208
713	116	213
658	117	253
588	125	213
641	125	234
645	113	282
-6	-6	-6
521	113	257
461	98	278
513	117	241
498	125	262
413	145	292
523	149	296
592	156	272

FLIGHT LINE:115

MAG
===
678
682
686
676
692
662
694
772
678
694
672
652
815
431
375
487
408
0

AFB
===
282
188
272
254
247
242
242
301
354
356
337
337
325
313
313
282
258
0

MFB
===
454
509
545
532
462
317
364
443
522
529
462
645
522
458
494
482
407
0

FLIGHT LINE: 128

MFB	AFB	HFB
---	---	---
-1	-1	-1
483	489	576
264	86	168
431	74	23
458	78	184
525	94	145
588	94	141
643	185	145
478	98	168
392	94	188
486	58	164
395	58	192
462	54	129
427	35	185
-2	-2	-2
568	43	145
647	43	121
564	35	185
556	23	78
494	27	145
564	27	113
592	19	189
-3	-3	-3
533	19	113
313	19	189
434	15	66
666	19	185
658	19	74
592	23	98
611	23	98
-4	-4	-4
615	19	86
434	19	82
443	15	78
588	15	74
415	11	86
541	7	58
634	15	47
645	19	78
286	11	78
317	3	47
486	7	27
513	7	78
435	11	66
466	11	78
458	7	66
529	7	43
717	3	58
721	3	58
419	3	39
82	3	58
368	3	47
458	3	35
478	3	39
392	3	47
411	3	47
541	3	54
541	3	74

FLIGHT LINE: 129

MRG	AFG	HFG
===	===	===
-5	-5	-5
523	6	66
549	6	78
580	6	66
411	6	62
466	11	62
521	27	58
219	39	78
227	47	66
458	43	78
294	54	74
287	66	98
498	74	78
474	66	50
376	58	62
505	78	78
581	78	58
474	58	62
619	43	58
776	23	38
-6	-6	-6
521	27	58
223	32	38
419	35	11
537	35	31
619	27	58
569	39	62
596	47	62
698	38	33
749	47	19
627	27	27
392	19	58
407	23	19
498	23	43
494	19	31
380	19	31
317	19	31
486	23	50
454	23	23
572	19	23
784	15	31
835	15	15
713	15	11
517	23	15
627	31	23
0	0	0

FLIGHT LINE: 138

MAG	AFB	HFB
===	===	===
-1	-1	-1
611	384	372
431	58	58
635	54	47
874	62	74
619	58	43
670	62	54
596	58	86
384	66	58
431	70	66
585	62	58
611	70	98
733	74	78
819	82	62
564	78	54
447	74	82
498	74	31
513	78	54
549	78	62
392	74	58
447	70	70
541	70	66
494	74	70
368	66	39
483	66	78
384	62	86
439	66	82
487	74	66
645	74	47
680	70	50
490	70	58
415	70	3
408	74	54
458	70	67
498	70	66
647	66	38
-2	-2	-2
658	66	66
641	62	58
189	58	54
172	58	82
498	58	74
661	54	62
619	58	43
588	39	47
478	47	74
533	47	78
572	58	98
635	43	39
588	54	86
647	58	82
796	47	74
788	58	66
627	43	54
556	54	86
396	43	78
400	58	82
298	43	31

FLIGHT LINE: 135

MAG	DFB	HFB
===	===	===
309	50	94
462	58	74
592	50	70
547	54	47
615	54	19
662	54	82
-3	-3	-3
741	47	54
815	47	7
721	47	27
454	50	62
503	54	7
643	50	82
568	58	62
592	54	62
482	56	98
450	54	66
474	50	47
696	50	39
823	54	82
552	58	98
407	58	66
360	54	33
423	62	23
498	78	90
674	78	105
768	70	47
725	70	7
447	66	113
-4	-4	-4
466	94	123
684	82	86
537	90	94
403	94	105
462	113	145
662	103	121
407	121	43
423	117	82
682	123	149
698	137	82
627	137	141
486	141	156
466	141	152
415	152	188
643	152	215
933	152	136
627	180	188
482	184	270
623	184	290
450	180	258
345	184	136
486	168	245
585	211	368
478	180	333
0	0	0

FLIGHT LINE: 149

MAG	AFB	HFB
---	---	---
-1	-1	-1
219	364	470
470	19	62
525	31	113
749	35	82
811	39	105
574	43	86
549	35	94
337	35	98
737	35	74
737	39	74
654	27	58
754	15	23
729	27	58
474	23	43
458	15	19
356	15	27
380	11	19
666	19	31
-2	-2	-2
830	11	3
527	7	15
572	3	15
736	3	19
831	3	19
478	3	15
345	3	19
584	3	15
482	3	23
619	3	19
937	3	15
830	3	19
745	3	3
427	3	35
-3	-3	-3
647	3	23
789	3	31
478	3	23
576	3	15
647	3	31
600	3	27
638	3	31
498	3	23
474	7	35
396	7	31
646	11	31
745	11	27
712	15	39
796	15	31
454	19	39
552	23	35
554	23	43
658	23	35
600	31	39
537	31	43
0	0	0

FLIGHT LINE: 155

MAG	AFS	HFS
===	===	===
-1	-1	-1
1000	392	415
847	54	62
380	58	58
631	54	78
1000	54	66
768	47	66
725	50	54
839	47	54
772	47	54
729	47	70
776	47	78
894	50	58
835	50	66
531	54	90
572	50	78
541	54	70
584	54	54
584	54	58
698	54	82
635	50	66
470	50	54
643	50	54
1000	50	58
1000	50	66
1000	54	66
1000	58	70
949	54	78
949	58	86
-2	-2	-2
949	50	74
750	50	43
768	43	51
741	50	62
419	54	64
258	54	64
109	62	56
202	58	47
580	74	66
843	66	78
972	66	58
839	70	66
680	74	90
584	78	86
682	82	70
698	90	98
627	90	82
419	105	117
635	105	141
780	109	125
623	113	113
636	129	188
549	137	192
615	129	196
847	125	168
925	137	203
785	141	206
717	133	226

FLIGHT LINE: 156

MAG	AFS	HFS
===	===	===
882	113	184
925	113	156
958	136	223
984	164	305
792	137	286
297	113	192
478	117	176
819	125	192
788	137	305
-3	-3	-3
733	109	243
929	105	223
721	105	215
680	113	294
652	105	352
792	113	282
737	113	309
775	117	341
1000	125	317
772	121	403
584	137	384
752	121	305
882	145	368
1000	125	301
796	113	329
656	121	250
0	0	0

FLIGHT LINE: 100

MAG	AFB	HFB
---	---	---
-1	-1	-1
996	356	572
1000	0	106
945	0	107
811	0	106
929	0	140
984	0	105
937	0	103
854	0	141
945	7	120
1000	11	113
827	15	121
713	0	94
545	7	86
686	11	88
1000	11	82
1000	11	47
-2	-2	-2
1000	11	66
950	11	54
780	15	54
799	15	47
815	7	27
694	0	27
411	0	23
615	0	19
917	0	15
835	0	15
831	0	15
850	0	7
752	0	27
780	0	11
1000	0	0
945	0	0
768	0	0
717	0	0
874	0	0
1000	0	0
839	0	0
784	0	11
0	0	0



CLEMENTS
(BEAR)
LAKE

MUDDY
GULCH

ORE
MOUNTAIN

CREEK

ROOSEVELT
CREEK

RADIO
CREEK

CREEK

BITTER

LEGEND

LEGEND	
	EXCLUDED CLAIM
	CABIN SITE
	ADIT
	PIT
	WASHOUT
	PAVED HIGHWAY
	4x4 ROAD
	SKID ROAD
	TRAIL

MARALGO MINES LIMITED
BITTER CREEK CLAIM GROUP
BITTER CREEK AREA
SKEENA M.D. STEWART, B.C.
PROPERTY CLAIM LOCATION and
TOPOGRAPHICAL MAP
SCALE: 1:125,000 DATE: SEP. 1944 FIG.: 1 RYS.:
CHWELL CONSULTING CORP., VANCOUVER B.C., CANADA



LEGEND

○ • FLIGHTLINE

LEGEND

- EXCLUDED CLAIM
- CABIN SITE
- ADIT
- PIT
- WASHOUT
- PAVED HIGHWAY
- 4x4 ROAD
- SKID ROAD
- - - TRAIL

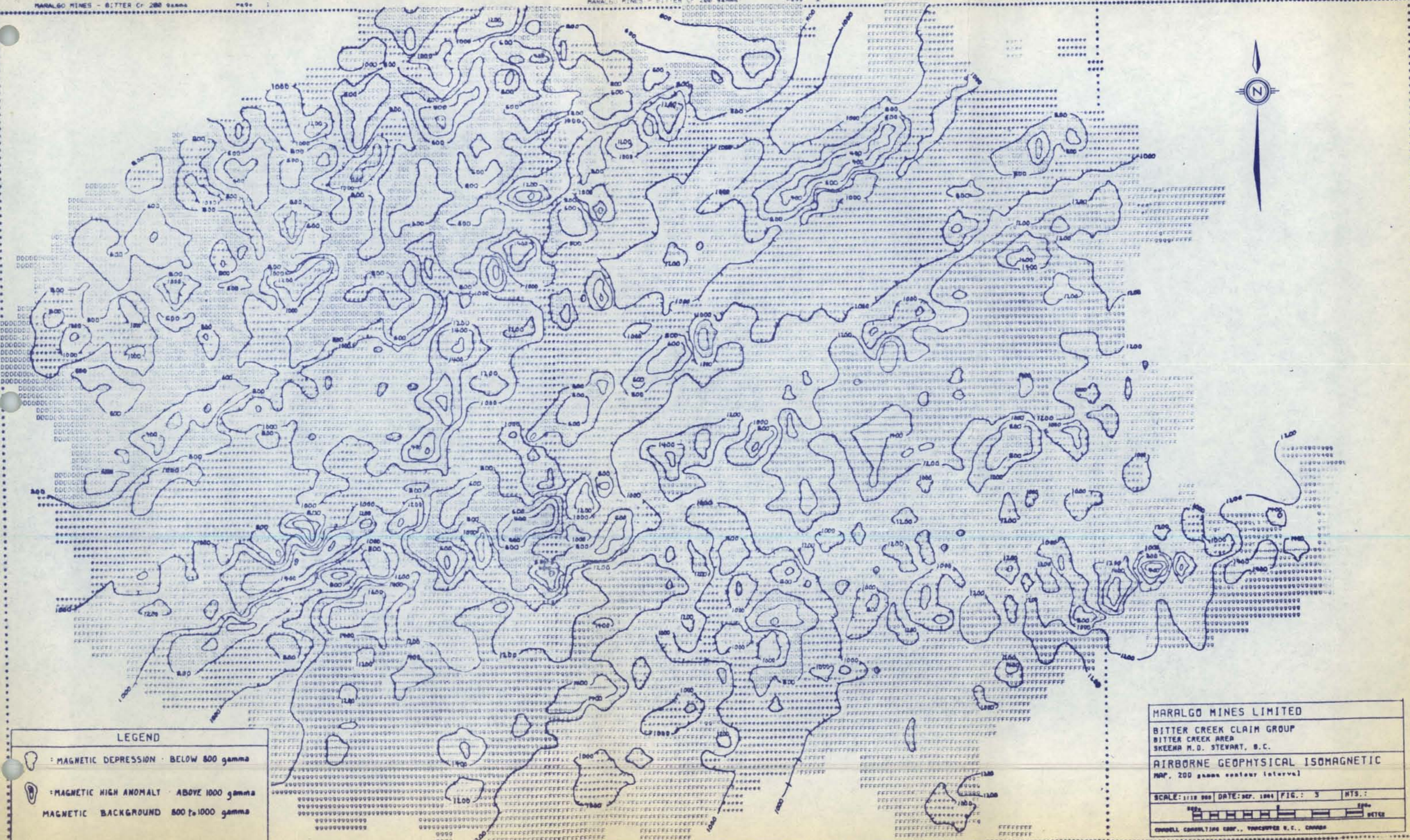
MARALGO MINES LIMITED

BITTER CREEK CLAIM GROUP
BITTER CREEK AREA
SKEENA H.D. STEWART, B.C.




AIRBORNE GEOPHYSICAL FLIGHTLINE
MAP WITH PROPERTY CLAIM LOCATION
AND TOPOGRAPHY

SCALE: 1:125 000 DATE: SEP. 1966 FIG.: 2 MTS.:
0 500 1000 2000 3000 METERS

CORBELL CONSULTING CORP., VANCOUVER B.C., CANADA




LEGEND

-  : MAGNETIC DEPRESSION - BELOW 800 gamma
-  : MAGNETIC HIGH ANOMALY - ABOVE 1000 gamma
-  : MAGNETIC BACKGROUND 800 to 1000 gamma

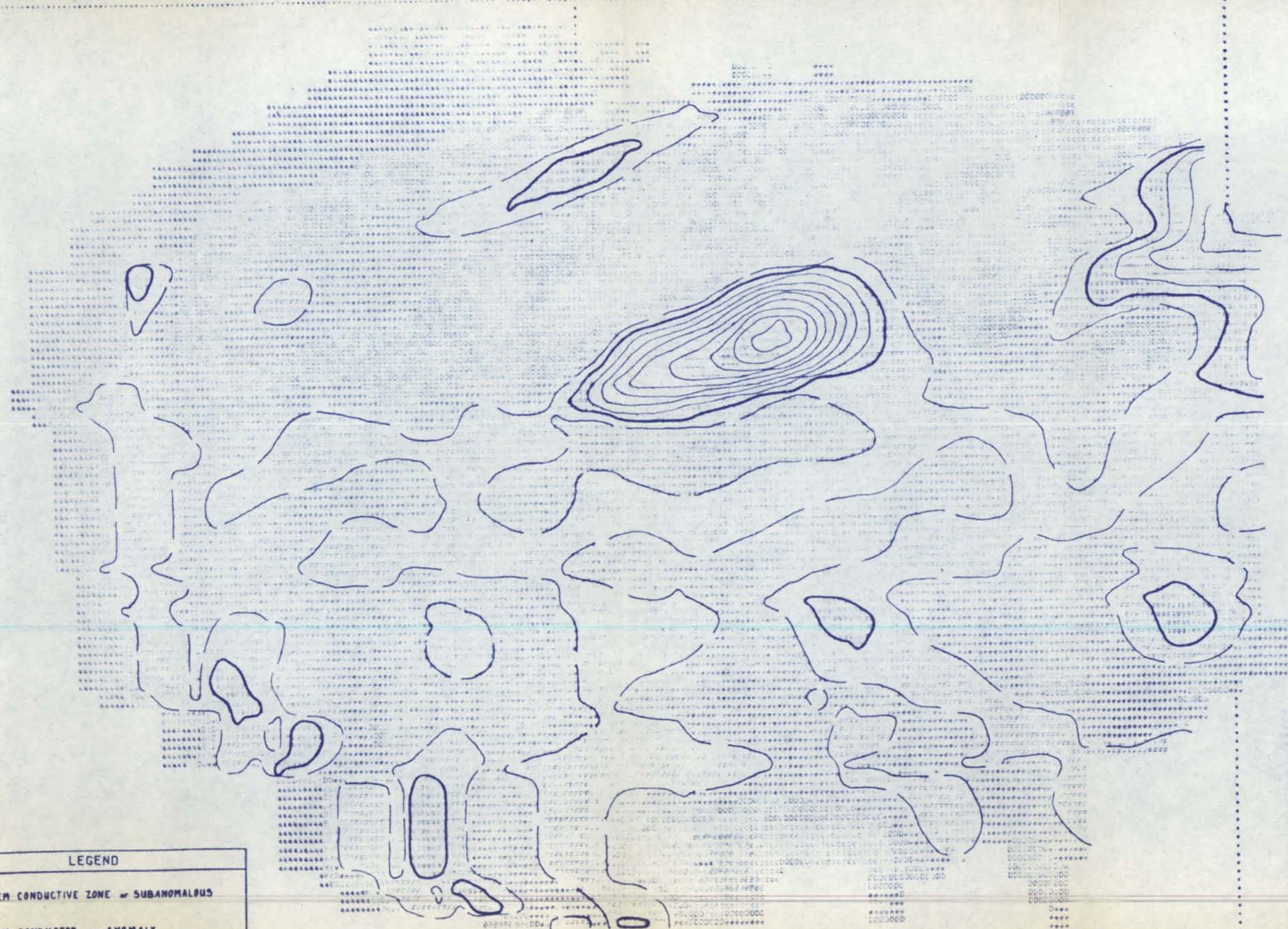
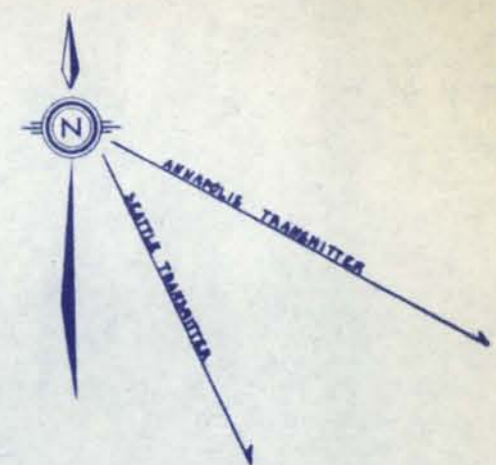
MARALGO MINES LIMITED
 BITTER CREEK CLAIM GROUP
 BITTER CREEK AREA
 SKEENA M.D. STEWART, B.C.

AIRBORNE GEOPHYSICAL ISOMAGNETIC
 MAP, 200 gamma contour interval



SCALE: 1:125,000 DATE: SEP. 1961 FIG.: 3 NTS.:



COUNSELL CONSULTING CORP., VANCOUVER B.C., CANADA

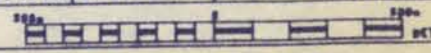


LEGEND

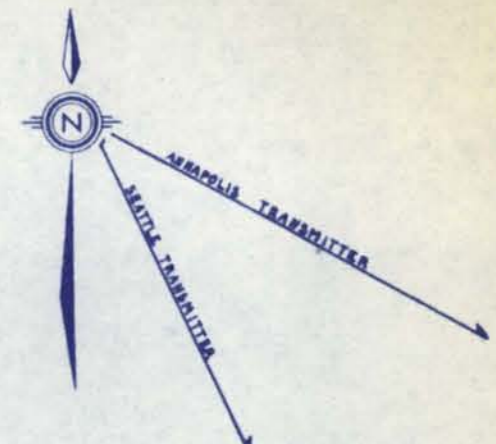
-  EM CONDUCTIVE ZONE or SUBANOMALOUS
-  EM CONDUCTOR or ANOMALY

MARALGO MINES LIMITED
 BITTER CREEK CLAIM GROUP
 BITTER CREEK AREA
 SKEENA R.D. STEWART, B.C.

AIRBORNE GEOPHYSICAL VLF-EM
 450(1) FIELD STRENGTH MAP
 at 52 centom interval

SCALE: 1:10 000 DATE: SEP. 1964 FIG.: 4 NTS.:


CAMPBELL CONSULTING CORP., VANCOUVER B.C., CANADA



LEGEND

- : EM CONDUCTIVE ZONE or SUBANOMALOUS
- : EM CONDUCTOR or ANOMALY

MARALGO MINES LIMITED

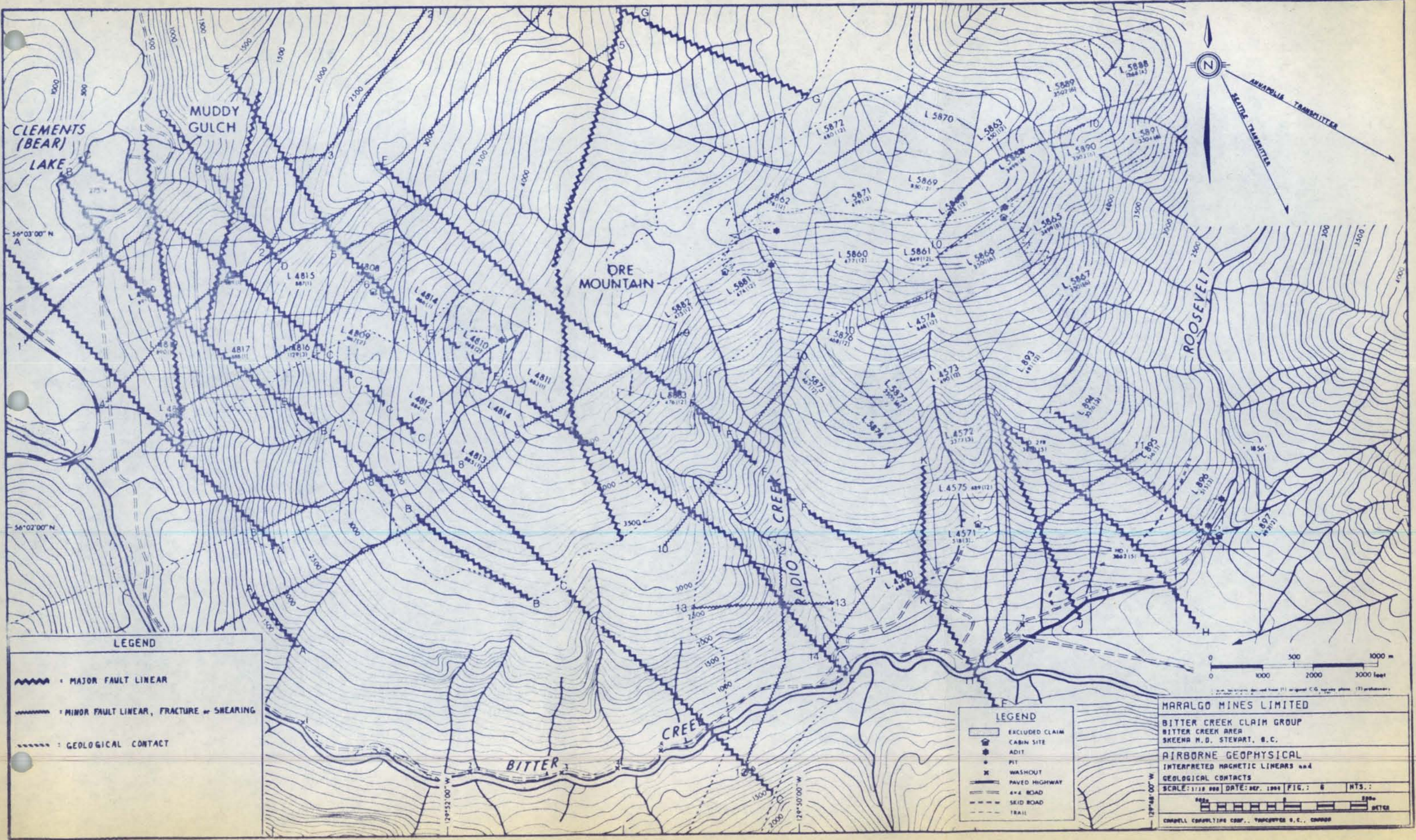
BITTER CREEK CLAIM GROUP
BITTER CREEK AREA
SKEENA R.D. STEWART, B.C.

AIRBORNE GEOPHYSICAL VLF-EM
Annapolis FIELD STRENGTH MAP
at 10% contour interval

SCALE: 1:10 000 DATE: SEP. 1966 FIG.: 5 MTS.:

 0 100 200 300 400 500 600 700 800 900 1000 METERS

CANWELL CONSULTING CORP., VANCOUVER B.C., CANADA



CLEMENTS
(BEAR)
LAKE

MUDDY
GULCH

DRE
MOUNTAIN

ROOSEVELT

BITTER
CREEK



ANAPOLIS TRANSMITTER
SEATTLE TRANSMITTER

56°03'00" N
A

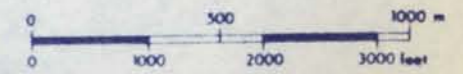
56°02'00" N

LEGEND

- MAJOR FAULT LINEAR
- MINOR FAULT LINEAR, FRACTURE or SHEARING
- GEOLOGICAL CONTACT

LEGEND

- EXCLUDED CLAIM
- CABIN SITE
- ADIT
- PIT
- WASHOUT
- PAVED HIGHWAY
- 4x4 ROAD
- SKID ROAD
- TRAIL

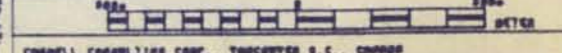


MARALGO MINES LIMITED

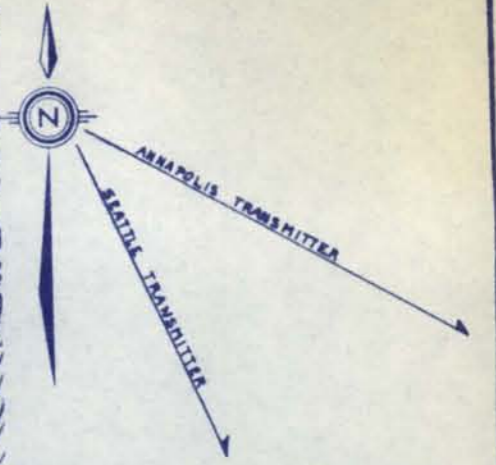
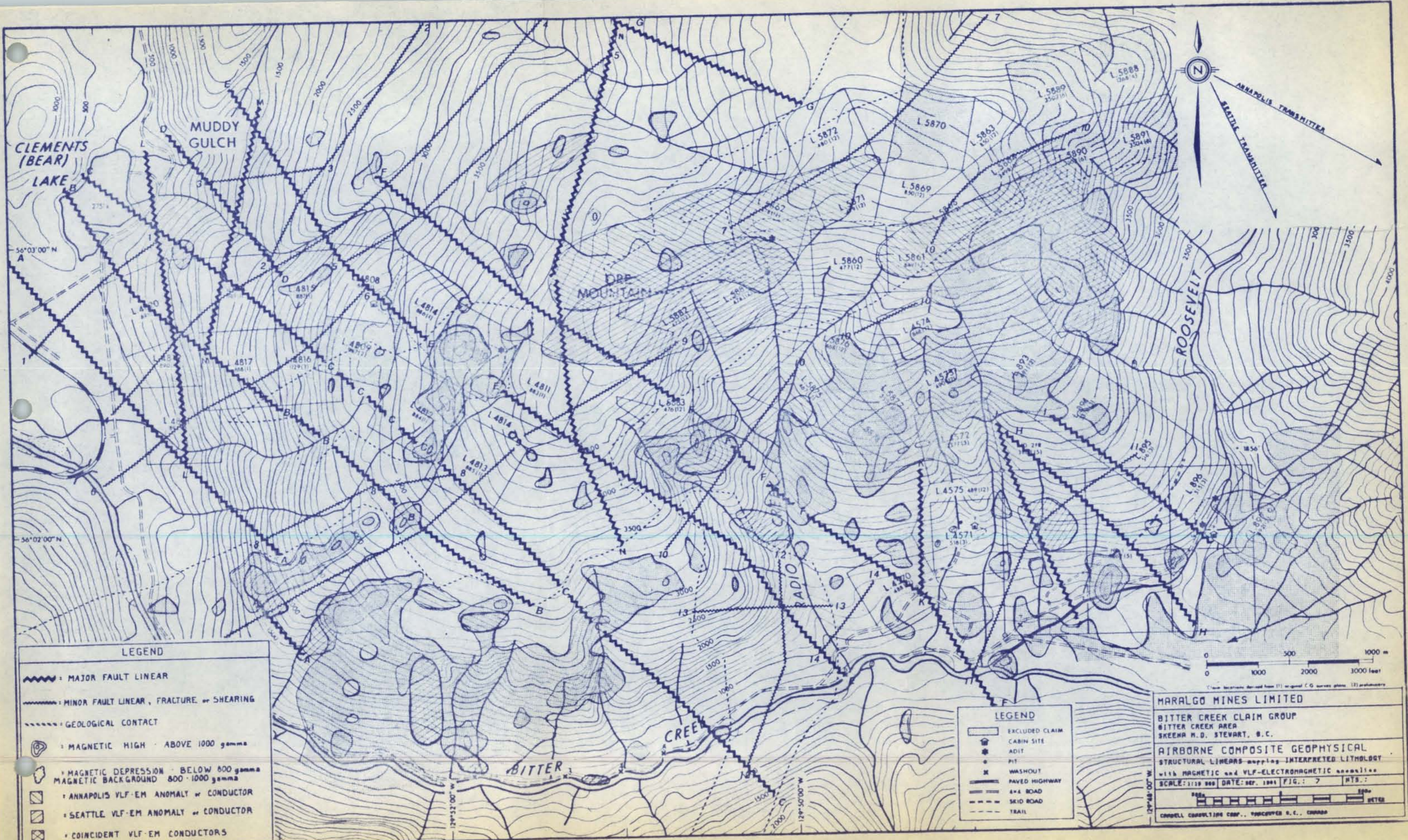
BITTER CREEK CLAIM GROUP
BITTER CREEK AREA
SKEENA M.D. STEWART, B.C.

AIRBORNE GEOPHYSICAL
INTERPRETED MAGNETIC LINEARS AND
GEOLOGICAL CONTACTS

SCALE: 1:125,000 DATE: SEP. 1991 FIG.: 6 HTS.:



CHAPPELL CONSULTING CORP., VANCOUVER B.C., CANADA

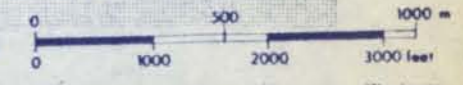


LEGEND

- MAJOR FAULT LINEAR
- MINOR FAULT LINEAR, FRACTURE or SHEARING
- GEOLOGICAL CONTACT
- MAGNETIC HIGH - ABOVE 1000 gamma
- MAGNETIC DEPRESSION - BELOW 800 gamma
MAGNETIC BACKGROUND 800-1000 gamma
- ANNAPOLIS VLF-EM ANOMALY or CONDUCTOR
- SEATTLE VLF-EM ANOMALY or CONDUCTOR
- COINCIDENT VLF-EM CONDUCTORS

LEGEND

- EXCLUDED CLAIM
- CABIN SITE
- ADIT
- PIT
- WASHOUT
- PAVED HIGHWAY
- 4x4 ROAD
- SKID ROAD
- TRAIL



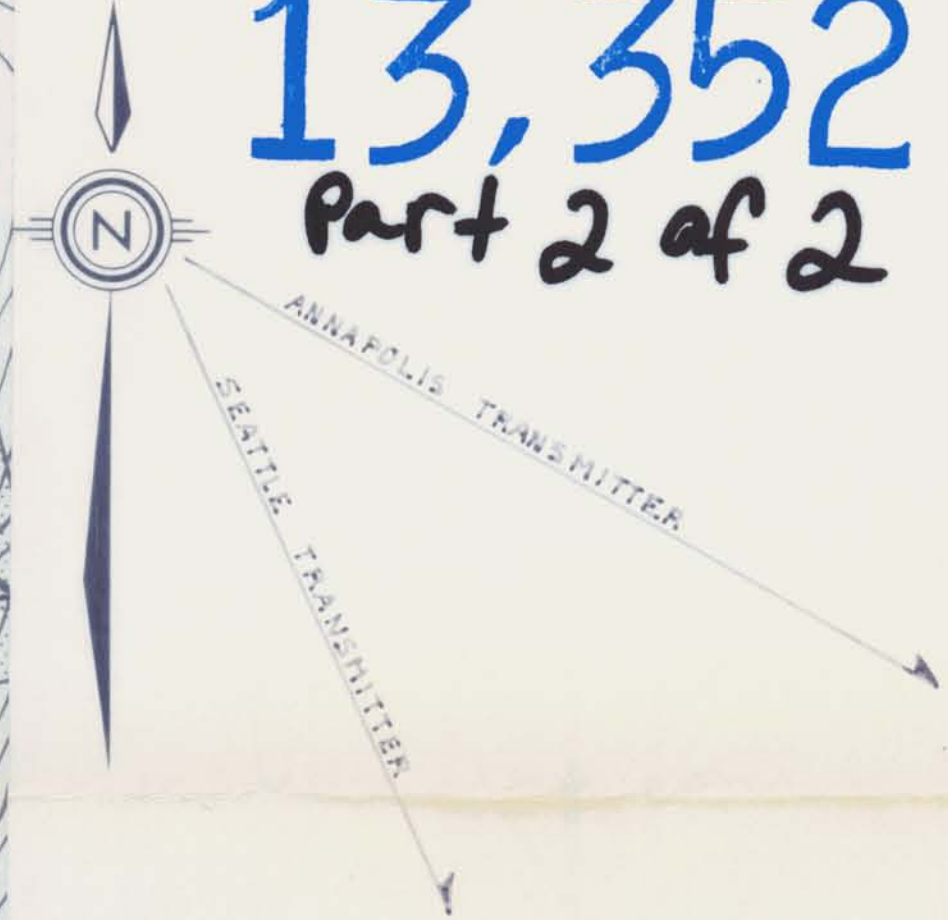
MARALGO MINES LIMITED
 BITTER CREEK CLAIM GROUP
 BITTER CREEK AREA
 SKEENA R.D. STEWART, B.C.

AIRBORNE COMPOSITE GEOPHYSICAL
 STRUCTURAL LINES - mapping INTERPRETED LITHOLOGY
 with MAGNETIC and VLF-ELECTROMAGNETIC anomalies

SCALE: 1:10 000 DATE: SEP. 1981 FIG.: 7 PLS.:

Copied from the original C.G. survey plates. (1) original C.G. survey plates. (2) preliminary

CORPUS COLLECTING COOP., VANCOUVER B.C., CANADA

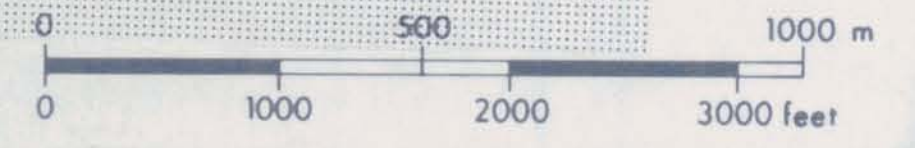


LEGEND

- = MAJOR FAULT LINEAR
- = MINOR FAULT LINEAR, FRACTURE or SHEARING
- = GEOLOGICAL CONTACT
- = MAGNETIC HIGH - ABOVE 1000 gamma
- = MAGNETIC DEPRESSION - BELOW 800 gamma
MAGNETIC BACKGROUND 800 - 1000 gamma
- = ANNAPOLIS VLF-EM ANOMALY or CONDUCTOR
- = SEATTLE VLF-EM ANOMALY or CONDUCTOR
- = COINCIDENT VLF-EM CONDUCTORS

LEGEND

- EXCLUDED CLAIM
- CABIN SITE
- ADIT
- PIT
- WASHOUT
- PAVED HIGHWAY
- 4x4 ROAD
- SKID ROAD
- TRAIL

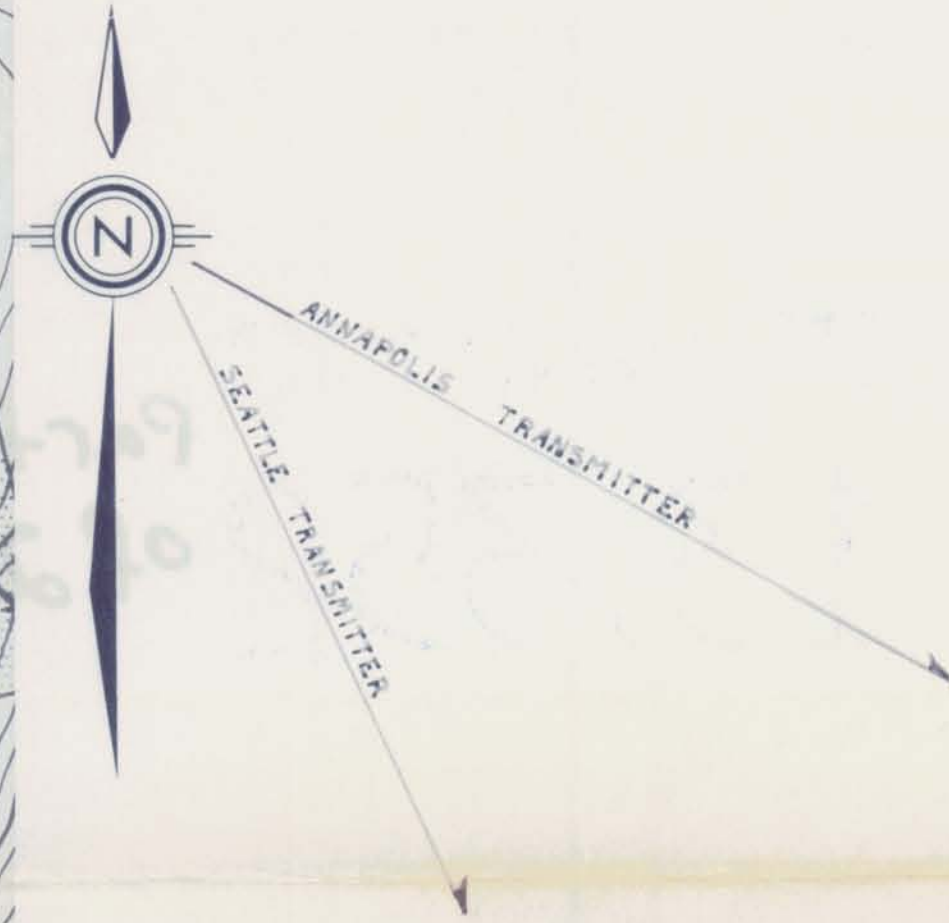
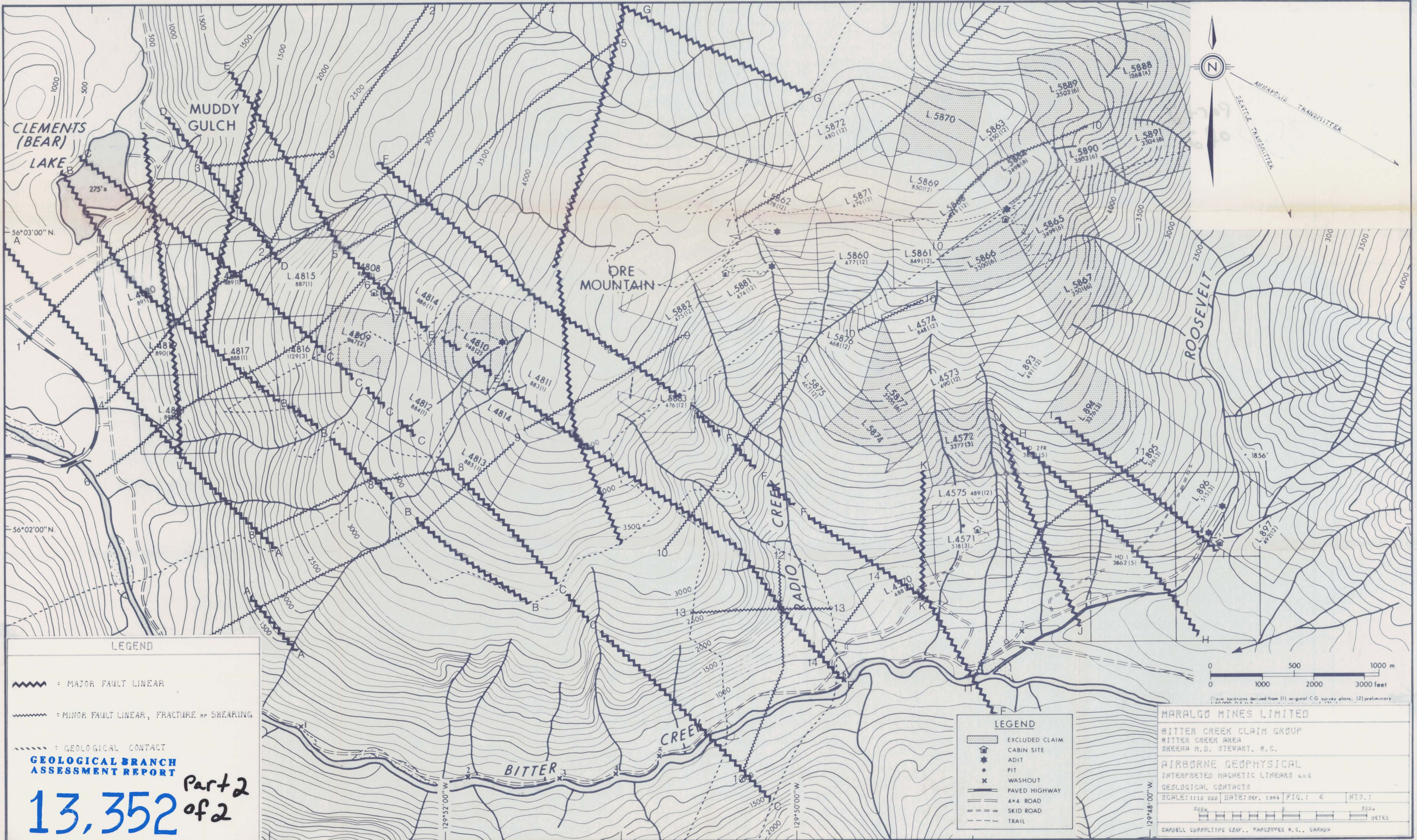


MARALGO MINES LIMITED
BITTER CREEK CLAIM GROUP
BITTER CREEK AREA
SKEENA H.D. STEWART, B.C.

AIRBORNE COMPOSITE GEOPHYSICAL
STRUCTURAL LINEARS mapping INTERPRETED LITHOLOGY
with MAGNETIC and VLF-ELECTROMAGNETIC anomalies
SCALE: 1:10 000 DATE: SEP. 1994 FIG.: 7 MTS.:

0 500 1000 2000 3000 METERS

CHADWELL CONSULTING CORP., VANCOUVER B.C., CANADA



LEGEND

- = MAJOR FAULT LINEAR
- = MINOR FAULT LINEAR, FRACTURE or SHEARING
- = GEOLOGICAL CONTACT

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,352 Part 2 of 2

LEGEND

- EXCLUDED CLAIM
- CABIN SITE
- ADIT
- PIT
- WASHOUT
- PAVED HIGHWAY
- 4x4 ROAD
- SKID ROAD
- TRAIL

MARALGO MINES LIMITED

BITTER CREEK CLAIM GROUP
BITTER CREEK AREA
SKEENA H.D. STEWART, R.C.

AIRBORNE GEOPHYSICAL
INTERPRETED MAGNETIC LINEARS and
GEOLOGICAL CONTACTS

SCALE: 1:125 000 DATE: Sep. 1964 FIG.: 6 NTS.:



CARDILL CONSULTING CORP., VANCOUVER B.C., CANADA